



**GETCAMERAS**



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## **MACHINE VISION LIGHT 2021**

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## General information and conditions

### Ordering process

Standard products that are offered in our [online store](#) can be ordered directly from the online store. For all other products in this catalog, please send an email to [cs@get-cameras.com](mailto:cs@get-cameras.com). We create the order for you and send you an order confirmation and payment link to complete the ordering process. Our general conditions apply and additionally the conditions desc.

### Purchasing and loan conditions

Products in this catalog are not available for loan and cannot be returned except for the following standard products:

- [LED1-RL-90-70W](#)
- [LED1-RL-96-00W](#)
- [LED1-RIH-100W](#)
- [LED1-BL-119x16W](#)
- [LED1-CO-100W](#)
- [LED1-FL-100x100W](#)
- [LED1-DL-150W](#)
- [LED3-LS-120-24V-28W-NIR850](#)
- [LED3-LS-120-24V-26W-WHITE](#)
- [ACC-PS-24V-60W-SET-V1](#)
- [LED2-SPOT-12V-3W-White](#)
- [ACC-PS-12V-30W-SET-V1](#)

The return conditions for these specific products are:

- The original order is paid with 100% pre-payment.
- Max 3 light products can be returned.
- Products should be returned within 1 week.
- The original order is ordered with express handling (€149 euro). If the original order is ordered with economy handling (€49euro) or standard handling (€99 euro), the return policy is not valid.
- All goods should be undamaged in the original packaging.
- If damaged or without original packaging extra cost will be charged.
- Refunds does not include handling cost or shipping charges.

### Delivery times

Only goods that are local stock goods are available as loan and can be ordered with our different handling options.

All other products are made on customer request. If light products are ordered together with an industrial camera, these will be shipped together. The delivery time of custom-made products can only be ordered with standard handling. The delivery time is around 3 weeks (standard handling).

### Color of LEDS

The LED1 series is available in the following light wavelengths:

Blue: 460-475nm

Green: 520-530nm

Red: 620-630nm

White color temp: 6000-7500K

### Lifetime of Lighting

In the machine vision light market, the standard expected lifetime is more than 30,000 hours (non-guaranteed value) for the LEDS. Our lighting complies to this standard.

### Different colors NIR, UV, RGB

On request the lights can be equipped with different LED's. Examples are Ultraviolet (UV), Near infrared (NIR 750nm, NIR 940nm) and RGB LEDs. These custom-made lighting will always be more expensive than our standard lighting version. Please send an email to [cs@get-cameras.com](mailto:cs@get-cameras.com) with the part number of the light you want to have equipped with a different LED color.

### Diffusers and polarizers

On request, lights can be equipped with a diffuser or polarizer. Bar lights and backlights are standard equipped with a diffuser. Please send an email to [cs@get-cameras.com](mailto:cs@get-cameras.com) with the part number of the light you want to have equipped with a diffuser or

polarizer filter.

### **CE & FCC Certification**

The products are CE certified, therefore the products can be used in the EU. The products are not FCC certified, therefore these products can't be sold to the USA. If FCC certification is required, this can be arranged for larger order quantities. Please contact [cs@get-cameras.com](mailto:cs@get-cameras.com) for further information regarding certifications.

### **Warranty**

Products in this catalog have a 1-year carry-in warranty.

## Accessories (cables, power supplies and strobe controllers)

The following accessory are available:

Partnumber	Description	Price (Euro)
LED1-CABLE-FCB1	1 meter extension cable for 24V light	€ 6,00
LED1-CABLE-FCB3	3-meter extension cable for 24V light	€ 12,00
LED1-CABLE-FCB5	5-meter extension cable for 24V light	€ 18,00
LED1-CABLE-FCB3-3P-2P	3-meter converter cable to use 24V light on strobe controller	€ 12,00
LED1-CABLE-FCB3-2P-2P	3-meter extension cable for 12V light	€ 12,00
LED1-CABLE-FCB5-2P-2P	5-meter extension cable for 12V light	€ 18,00
LED1-FCB-LN3-4pin-3	3-meter extension cable for 48V linear lights	€ 80,00
<a href="#">LED10-PS-12V-30W-SET-V1</a>	100-240V Power supply, Output 12V 30W Din rail including Power cable and 3-meter light cable	€ 90,00
<a href="#">LED10-PS-24V-60W-SET-V1</a>	110-240V Power supply, Output 24V 60W Din rail including Power cable and 5-meter light cable	€ 90,00
<a href="#">LED1-PS2C-6024-4-Z</a>	4-Channel 24V / 60W power supply for machine vision light. Light intensity and trigger control for each channel including Din Rail mount	€ 224,00
LED1-PSC3-7548-1-LS	1-Channel 75W 48V for linear lights	€ 450,00
LED1-PSC3-55048-2-LS	2-Channel 550W 48V for linear lights	TBD
<a href="#">ACC-MV-LED-STROBECONTROLLER-V1</a>	Mini Strobe controller 12 – 48V, max 2A, 10us-1023ms	€ 220,00

## LED SPOT IP66 - LARGE OBJECTS, LED3-LS series

High-intensity led spot with 120 degree opening angle. It is strongly recommended to use the lights in pairs of 2, to get a better light distribution.

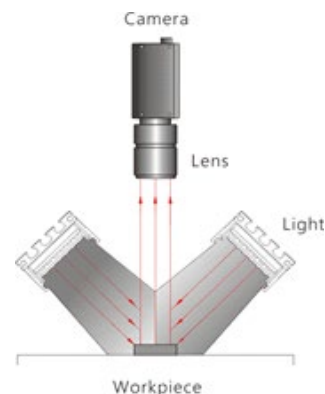
### Applications:

Illuminating large objects for object recognition, classification and reading barcodes and datamatrix codes



### Selection guide

LED3-LS-	-120	-24	-26	-WHITE
Model	Opening angle LED	Voltage	Power consumption	Color



Series	Model	Optical		Electrical		Dimension OD×ID×Height mm	Price (Euro)
		Number of LED	Opening Angle	Voltage (V)	Power (W)		
1	LED3-LS-120-24V-26W-WHITE	12	120°	24	26W	135×110×91	€ 319,00
2	LED3-LS-120-24V-28W-NIR850	12	120°	24	28W	135×110×91	€ 319,00

## Ring Lights (Bright field), LED1-RL series

High-intensity bright field illumination.

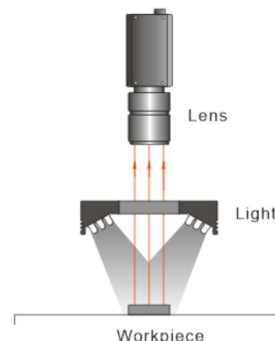
LEDs are arranged in flexible circuit boards, getting the high illumination intensity by mainly radiating the central area.

### Applications:

Character recognition, 2 dimension code, Electronical component and PCB.



Camera



### Selection guide

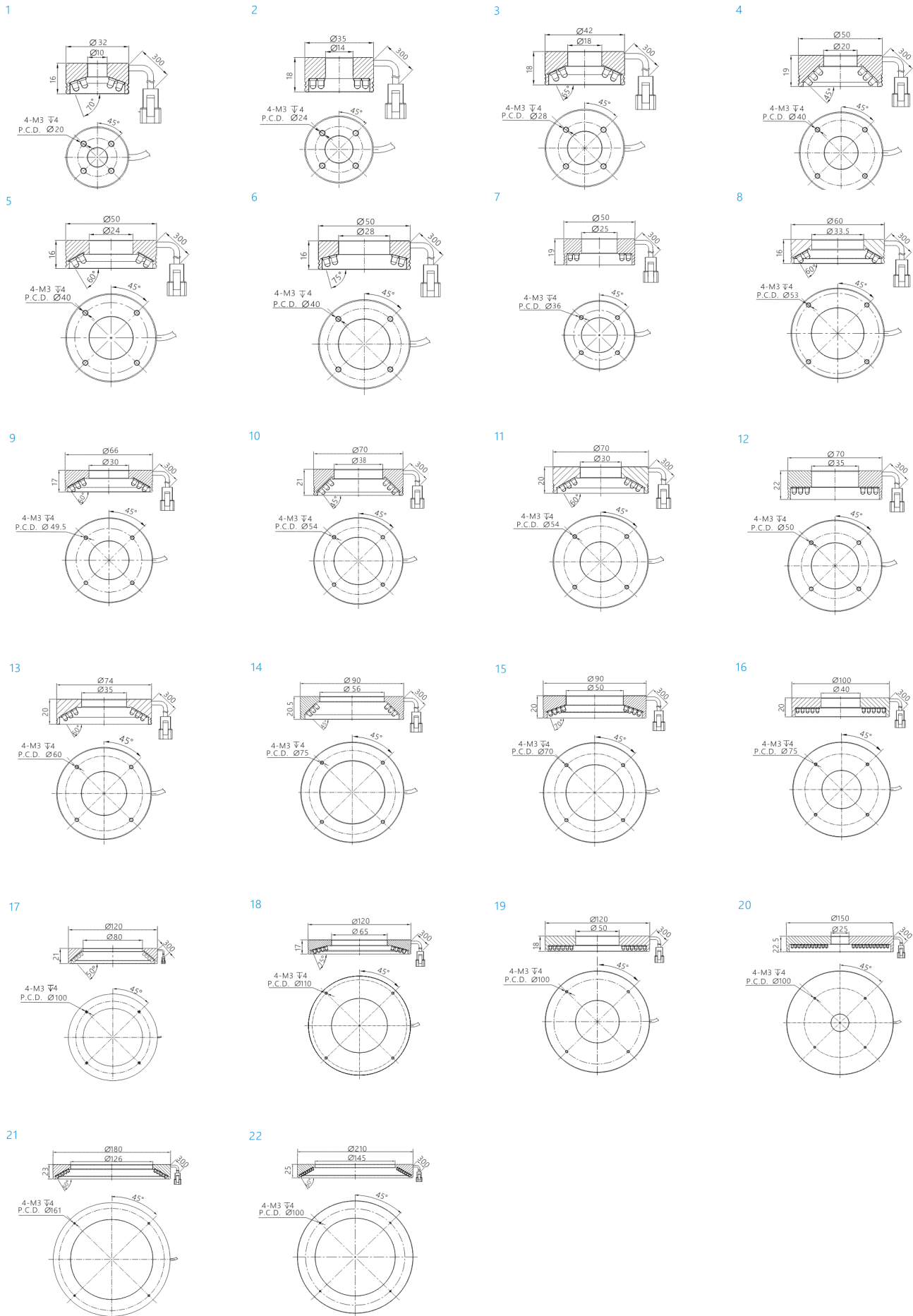
LED1-RL-	-	50	-	90	R
Model		Outer diameter		Angle	Color

Series	Model	Optical		Electrical			Dimension OD×ID×Height mm	Price (Euro)
		LED ring	Angle*1	Voltage (V)	Power (W)*2			
					●	●	●	
1	LED1-RL-32-70	2	70°	24	1,4	1,4	32×10×16	€ 86,00
2	LED1-RL-35-90	2	90°	24	1,5	1,5	35×14×18	€ 92,00
3	LED1-RL-42-65	2	65°	24	1,7	2,2	42×18×18	€ 100,00
4	LED1-RL-50-45	2	45°	24	2,5	3,8	50×28×16	€ 120,00
5	LED1-RL-50-60	2	60°	24	2,1	2,6	50×24×16	€ 120,00
6	LED1-RL-50-75	2	75°	24	1,8	2,5	50×28×16	€ 112,00
7	LED1-RL-50-90	2	90°	24	1,9	2,6	50×25×19	€ 196,00
8	LED1-RL-60-60	2	60°	24	3,1	3,2	60×33.5×16	€ 140,00
9	LED1-RL-66-60	3	60°	24	3,8	5,2	66×30×17	€ 158,00
10	LED1-RL-70-45	3	45°	24	4,1	5,8	70×38×21	€ 174,00
11	LED1-RL-70-60	3	60°	24	4,1	5,2	70×30×20	€ 174,00
12	LED1-RL-70-90	3	90°	24	4,1	4,8	70×35×22	€ 174,00
13	LED1-RL-74-60	3	60°	24	4	5,4	74×35×20	€ 172,00
14	LED1-RL-90-45	4	45°	24	6,6	6,4	90×50×20	€ 248,00
15	LED1-RL-90-70	6	70°	24	7,6	9,0	90×50×20	€ 204,00
16	LED1-RL-100-90	4	90°	24	9,9	10,0	100×40×20	€ 258,00
17	LED1-RL-120-50	4	50°	24	12,1	12,9	120×80×21	€ 306,00
18	LED1-RL-120-75	5	75°	24	13,1	15,5	120×65×17	on request
19	LED1-RL-120-90	6	90°	24	9,8	20,5	120×50×18	on request
20	LED1-RL-150-90	9	90°	24	18,5	24,9	150×25×22.5	on request
21	LED1-RL-180-60	5	60°	24	20,1	29,4	180×126×23	on request
22	LED1-RL-210-60	7	60°	24	23,5	30	210×145×25	on request

\*1 The angle is the angle between the light and the horizontal plane.

\*2 The power tolerance is +/-10%.



**LED1-RL Dimensions (mm)**


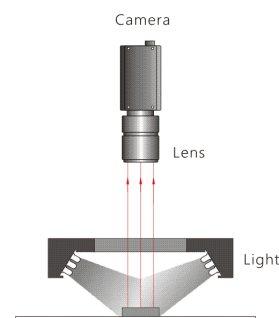
## Ring Lights (Dark-field), LED1-RL series

Ideal for edge detection and highlight scratches on glossy surfaces.

### Applications:

Edge detection, inspection for engraving/damage/stains on metal surfaces.

Reading laser imprints.



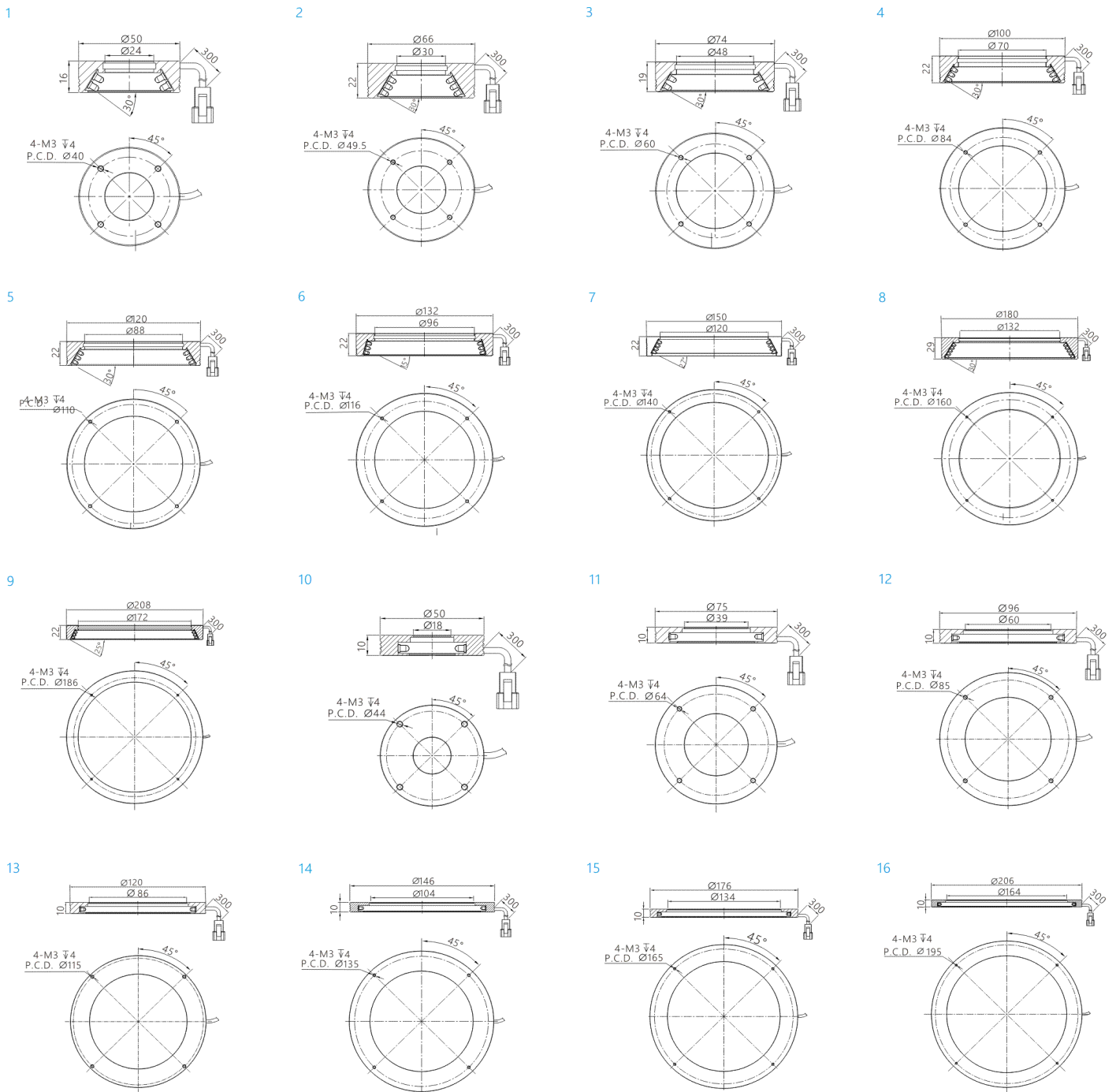
### Selection guide

LED1-RL	-	100	R
Model		Outer diameter	Color

No.	Model	Optical			Electrical			Dimension OD×ID×Height mm	Price (Euro)
		LED ring	Angle*1	Voltage (V)	Power (W) *2				
					Red	White	Blue	Green	
1	LED1-RL-50-30	2	30	24	2,0	2,6	50X24X16	€ 122,00	
2	LED1-RL-66-30	3	30	24	3,2	4,6	66X30X22	€ 158,00	
3	LED1-RL-74-30	2	30	24	3,2	4,2	74X48X19	€ 172,00	
4	LED1-RL-100-30	3	30	24	7,9	8,3	100X70X22	€ 267,00	
5	LED1-RL-120-30	3	30	24	8,4	10,5	120X88X22	€ 312,00	
6	LED1-RL-132-15	3	15	24	10,0	12,2	132X96X22	€ 328,00	
7	LED1-RL-150-30	4	30	24	14,3	18,5	150X120X22	€ 354,00	
8	LED1-RL-180-30	5	30	24	15	28,0	180X132X29	€ 526,00	
9	LED1-RL-208-25	3	25	24	17,8	18,0	208X172X22	€ 590,00	
10	LED1-RL-50-00	1	0	24	1,6	1,6	50X18X10	€ 166,00	
11	LED1-RL-75-00	1	0	24	2,0	3,5	75X43X10	€ 170,00	
12	LED1-RL-96-00	1	0	24	4,6	5,5	96X64X10	€ 214,00	
13	LED1-RL-120-00	1	0	24	4,8	4,8	120X88X10	€ 272,00	
14	LED1-RL-146-00	1	0	24	5,5	8,8	146X114X10	€ 260,00	
15	LED1-RL-176-00	1	0	24	8,8	11,0	176X144X10	on request	
16	LED1-RL-206-00	1	0	24	11,0	13,8	206X174X10	€ 440,00	

\*1 The angle is the angle between the light and the horizontal plane.

\*2 The power tolerance is +/-10%.

**LED1-RL Dimensions (mm)**


## Ring lights (Diffuse Flat Bright Field), LED1-RIH series

LEDs are embedded around a light-guiding diffusion plate.  
Uniform light is radiated from a flat emitting surface.

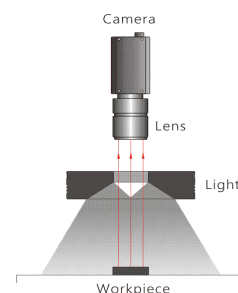
### Applications:

Inspection for parts mounted on circuit boards, surface inspection of metal parts, curved object, discs, small electronics components.



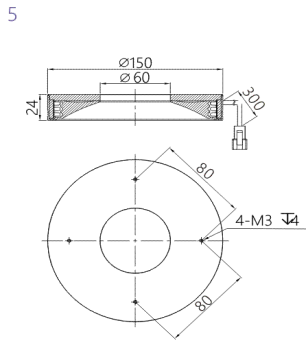
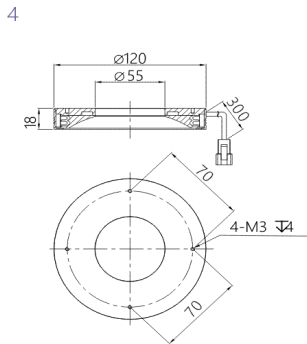
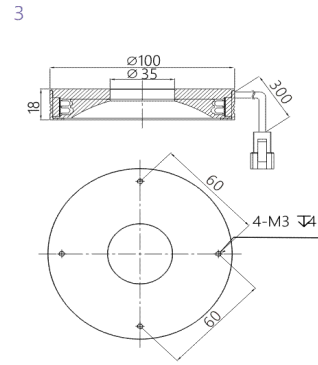
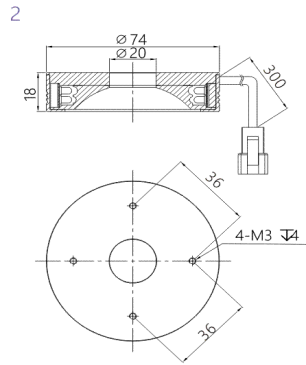
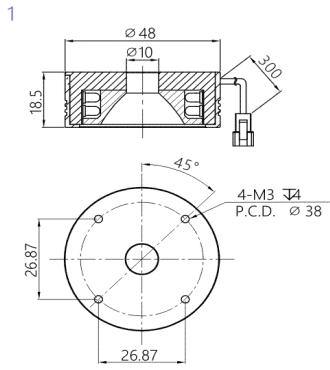
### Selection guide

LED1-RIH	-	74	R
Model		Outer diameter	Color



No.	Model	Electric				Dimension OD X ID X Height (mm)	Price (Euro)
		Voltage (V)	Power (W)				
			●	○	●	●	
1	LED1-RIH-48	24	2,2	3,8	48X10X18.5	€ 314,00	
2	LED1-RIH-74	24	3,6	6,3	74X20X18	€ 354,00	
3	LED1-RIH-100	24	7,4	9,7	100X35X18	€ 428,00	
4	LED1-RIH-120	24	9,9	12,7	100X55X18	on request	
5	LED1-RIH-150	24	15,0	20,2	150X60X24	€ 528,00	

\* The power tolerance is +/-10%.

**LED1-RIH Dimensions (mm)**


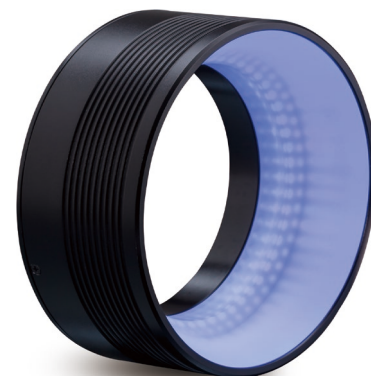
## Ring lights (Diffuse Dark Field), LED1-RIL series

Vertically arranged LEDs is transmitted through the light-guiding diffusion plate. Provides diffuse light at a low angle emitting surface.

### Applications:

Small defects like pin hole, splinter on glass.

Edge extraction of metal parts, Character recognition for electronical parts. label inspection.

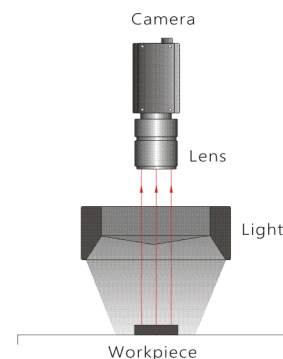


### Selection guide

LED1-RIL	-	100	R
Model		Outer diameter	Color

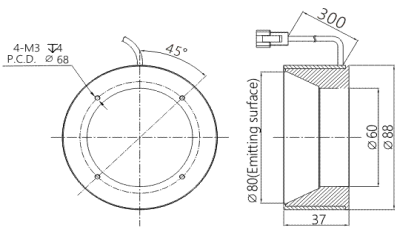
No.	Model	Electric			Dimension OD X ID X Height (mm)	Price (Euro)
		Voltage (V)	Power (W)			
			<span style="color: red;">●</span>	<span style="color: blue;">●</span>		
1	LED1-RIL-88	24	4,6	7,5	88X60X37	€ 302,00
2	LED1-RIL-100	24	4,9	7,8	100X73X40	€ 318,00
3	LED1-RIL-136	24	6,6	12,4	136X109X40	€ 458,00
4	LED1-RIL-180	24	9,5	13,8	180X153X40	€ 578,00
5	LED1-RIL-250	24	13,1	32,8	250X210X50	€ 880,00

\* The power tolerance is +/-10%.

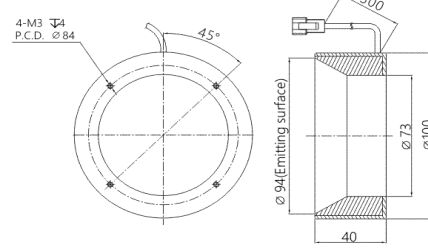


**LED1-RIL Dimensions (mm)**

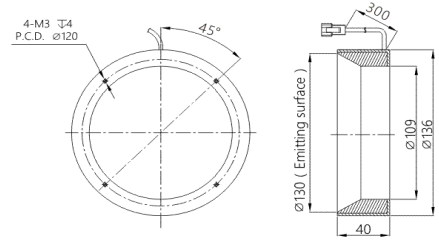
1



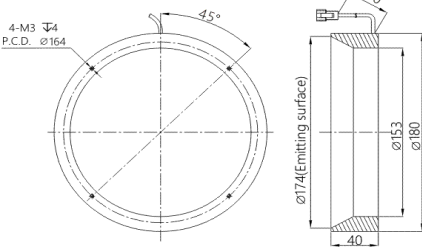
2



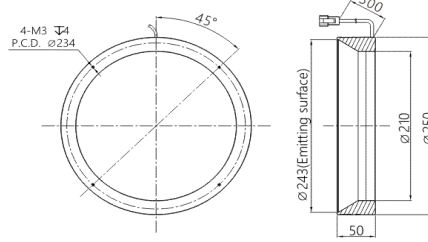
3



4



5



## Square Lights (Diffuse Low Angle), LED1-SQR series

Provide diffuse light at a low angle from four directions

### Application:

Visual inspection for electronic parts.

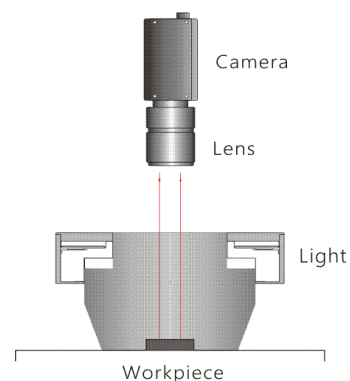
Visual and pattern inspections for circuit board, fault inspection for LCDs and IC lead inspections.

Scratches on metal surface. Solder ball inspection.



### Selection guide

LED1-SQR	-	32	R
Diffuse Square Light		Emitting area	Color

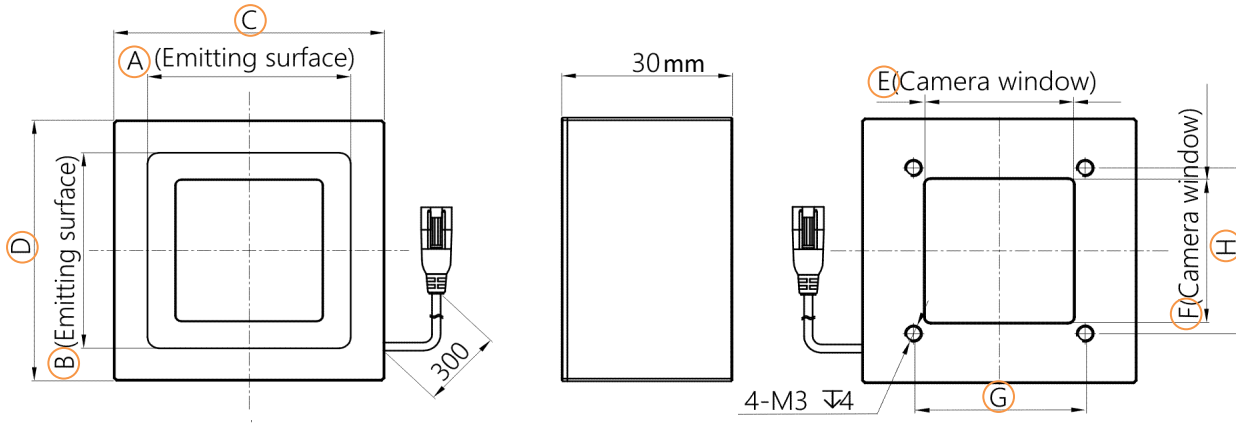


### Lineup

No.	Model	Optical		Electric			Dimension L*W*H (mm)	Price (Euro)
		Working distance	Camera window (mm)	Voltage (V)	Power (W)			
					●	○ ● ●	● ● ●	
1	LED1-SQR-32	5	10X10	24	2,2	2,9	32X32X30	on request
2	LED1-SQR-48	5	26X26	24	4,2	6,2	48X48X30	on request
3	LED1-SQR-75	12	53X53	24	9,9	9,4	75X75X30	on request
4	LED1-SQR-96	15	74X74	24	12,9	11,5	96X96X30	on request
5	LED1-SQR-120	25	98X98	24	15,2	16,8	120X120x30	on request
6	LED1-SQR-200X120	35	177X97	24	15,5	21,8	200X120X30	on request

\* The power tolerance is +/-10%.



**LED1-SQR Dimensions (mm)**


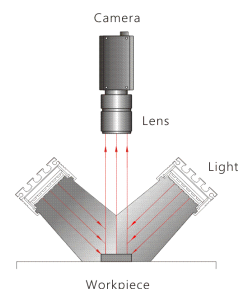
Index No	Size(mm)								Power (w)		Weight ( G )
	A	B	C	D	E	F	G	H	R	W/G/B	
1	22	22	32	32	10	10	15	15	2.2	2.9	50
2	36	36	48	48	26	26	30	30	4.2	6.2	70
3	63	63	75	75	53	53	57	57	9.9	9.4	120
4	84	84	96	96	74	74	78	78	12.9	11.5	150
5	108	108	120	120	98	98	102	102	15.2	16.8	185
6	107	187	120	200	97	177	102	180	15.5	21.8	300

## Bar Lights, LED1-BL series

Provide direct light from an emitting part equipped with LEDs in straight lines

### Applications:

Various inspections for reading text, visual inspection for damage on long and thin workpieces.



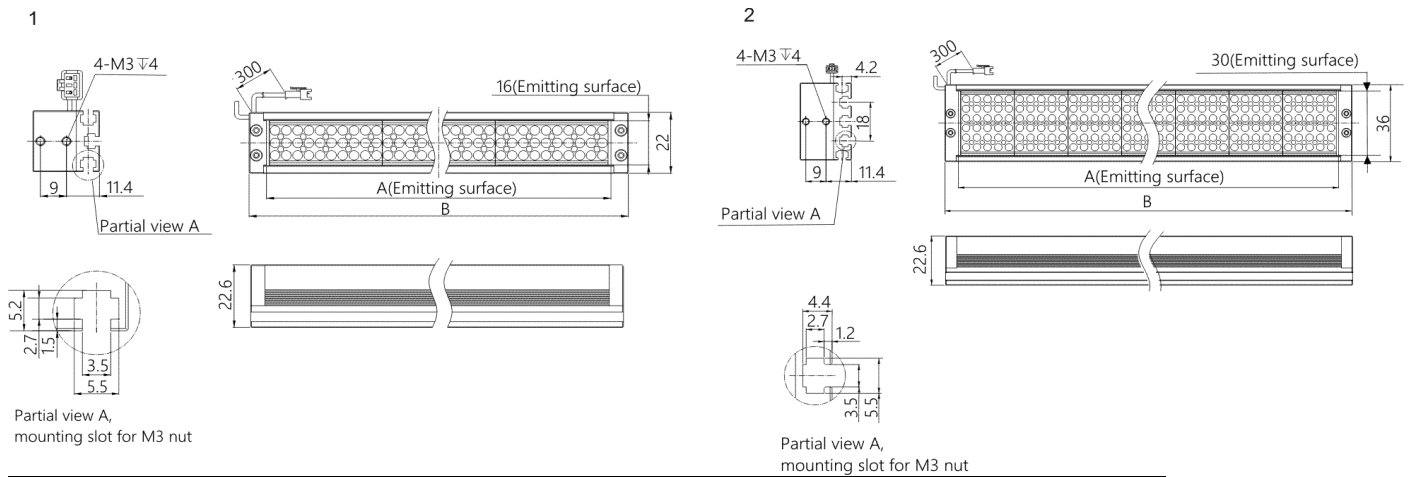
### Selection guide

LED1-BL	-	119	X	16	R
Model		Emitting Length		Emitting width	Color

No.	Model	Optical		Electrical			Dimension L x W x H (mm)	Price (Euro)	
		LED Rows	Emitting area L X W (mm)	Voltage (V)	Power (W)				
1	LED1-BL-41X16	3	41x16	24	1,3	1,7	53x22x23	€ 100,00	
2	LED1-BL-80X16	3	80x16	24	2,7	3,4	92x22x23	€ 116,00	
3	LED1-BL-119X16	3	119x16	24	4,0	5,1	131x22x23	€ 134,00	
4	LED1-BL-158X16	3	158x16	24	5,5	6,9	170x22x23	€ 154,00	
5	LED1-BL-197X16	3	197x16	24	6,6	8,6	209x22x23	€ 170,00	
6	LED1-BL-74X30	6	74x30	24	2,6	4,4	86x36x23	€ 120,00	
7	LED1-BL-98X30	6	98x30	24	3,5	5,8	110x36x23	€ 142,00	
8	LED1-BL-146X30	6	146x30	24	5,2	8,7	158x36x23	€ 162,00	
9	LED1-BL-170X30	6	170x30	24	6,1	10,2	182x36x23	€ 184,00	
10	LED1-BL-194X30	6	194x30	24	7,0	12,1	206x36x23	€ 210,00	
11	LED1-BL-218X30	6	218x30	24	7,8	13,7	230x36x23	€ 232,00	
12	LED1-BL-266X30	6	266x30	24	9,6	16,7	278x36x23	€ 282,00	
13	LED1-BL-290X30	6	290x30	24	10,5	18,2	302x36x23	€ 300,00	
14	LED1-BL-386X30	6	386x30	24	14,6	25,3	398x36x23	€ 352,00	
15	LED1-BL-434X30	6	434x30	24	16,4	28,5	446x36x23	€ 394,00	
16	LED1-BL-578X30	6	578x30	24	21,9	38,0	590x36x23	€ 468,00	

\* The power tolerance is +/-10%.

## LED1-BL Dimensions (mm)



Index Model	Size		Rated power		Weight(g)
	A	B	R	W/G/B	
LED1-BL-41X16	41	53	1,3	1,7	50
LED1-BL-80X16	80	92	2,7	3,4	80
LED1-BL-119X16	119	131	4	5,1	100
LED1-BL-158X16	158	170	5,5	6,9	120
LED1-BL-197X16	197	209	6,6	8,6	150
LED1-BL-275X16	275	287	6,6	12,1	210

Index Model	Size		Rated power		Weight(g)
	A	B	R	W/G/B	
LED1-BL-50X30	50	62	1,7	2,9	80
LED1-BL-74X30	74	86	2,6	4,4	100
LED1-BL-98X30	98	110	3,5	5,8	120
LED1-BL-146X30	146	158	5,2	8,7	160
LED1-BL-170X30	170	182	6,1	10,2	180
LED1-BL-194X30	194	206	7	12,1	200
LED1-BL-218X30	218	230	7,8	13,7	220
LED1-BL-266X30	266	278	9,6	16,7	260
LED1-BL-290X30	290	302	10,5	18,2	280
LED1-BL-386X30	386	398	14,6	25,3	370
LED1-BL-434X30	434	446	16,4	28,5	410
LED1-BL-578X30	578	590	21,9	38	530

## Combined Bar Lights, LED1-BLM series

Free angle adjustment. Intensity of each light can be controlled independently.

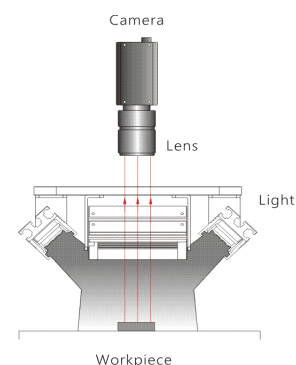
### Applications:

Character recognition and defects for large square surfaces.



### Selection guide

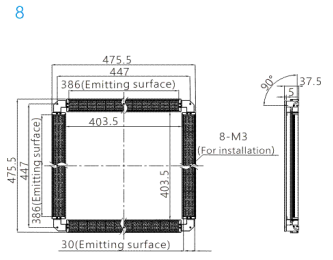
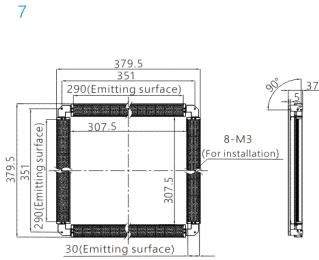
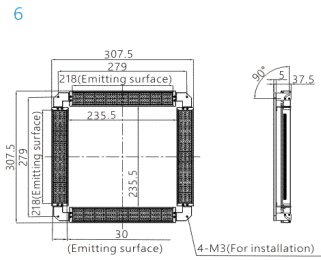
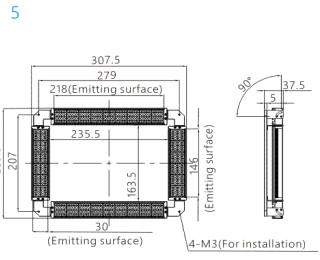
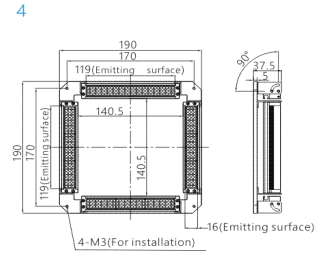
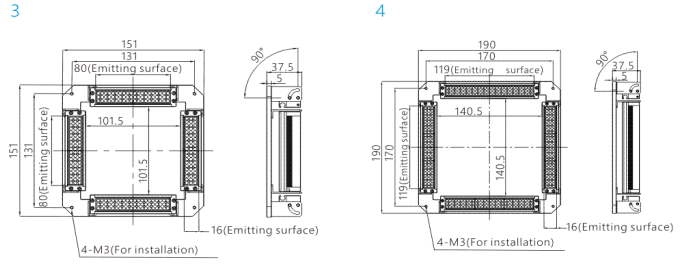
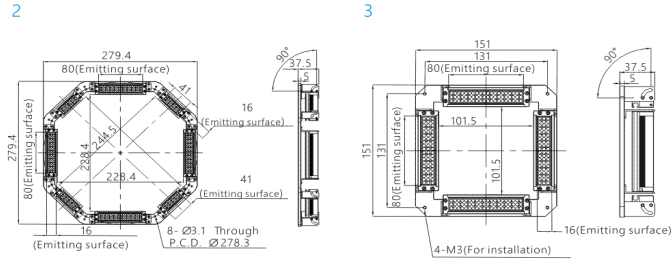
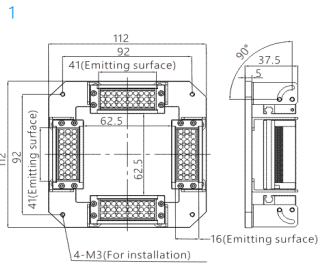
LED1-BLM	-	119	X	119	R
Model		Emitting length		Emitting width	Color



No.	Model	Optical	Electrical			Dimension L x W x H (mm)	Price (Euro)
		Opening hole L X W(mm)	Voltage (V)	Power Signal (W)			
				●	○ ● ●		
1	LED1-BLM-41X41	62.5x62.5	24	4*1.3	4*1.7	112x112x37.5	on request
2	LED1-BLM-80X41	101.5x62.5	24	4*2.7+4*1.3	4*3.4+4*1.3	280x280x37.5	on request
3	LED1-BLM-80X80	101.5x101.5	24	4*2.7	4*3.4	151x151x37.5	on request
4	LED1-BLM-119X119	140.5*140.5	24	4*4	4*5.1	190x190x37.5	on request
5	LED1-BLM-218X146	235.5x163.5	24	2*7.8+2*5.2	2*13.7+2*8.7	307.5x235.5*37.5	€ 980,00
6	LED1-BLM-218X218	235.5x235.5	24	4*7.8	4*13.7	307.5x307.5x37.5	on request
7	LED1-BLM-290X290	307.5x307.5	24	4*10.5	4*18.2	379.5x379.5x37.5	on request
8	LED1-BLM-386X386	403.5x403.5	24	4*14.6	4*25.3	475.5*475.5*37.5	€ 1666

\* The power tolerance is +/-10%.

## LED1-BLM Dimensions (mm)



## Coaxial Lights, LED1-CO series

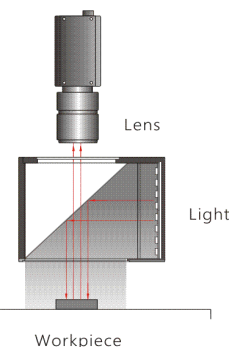
Provide diffuse and uniform illumination from the same axis as the camera.  
High brightness plug-in type LED (-D) and High uniform SMD LED type for selection.

### Applications:

Scratch or damage inspection on glossy and mirror surfaces.  
Mark point position on FPC.



Camera



Workpiece

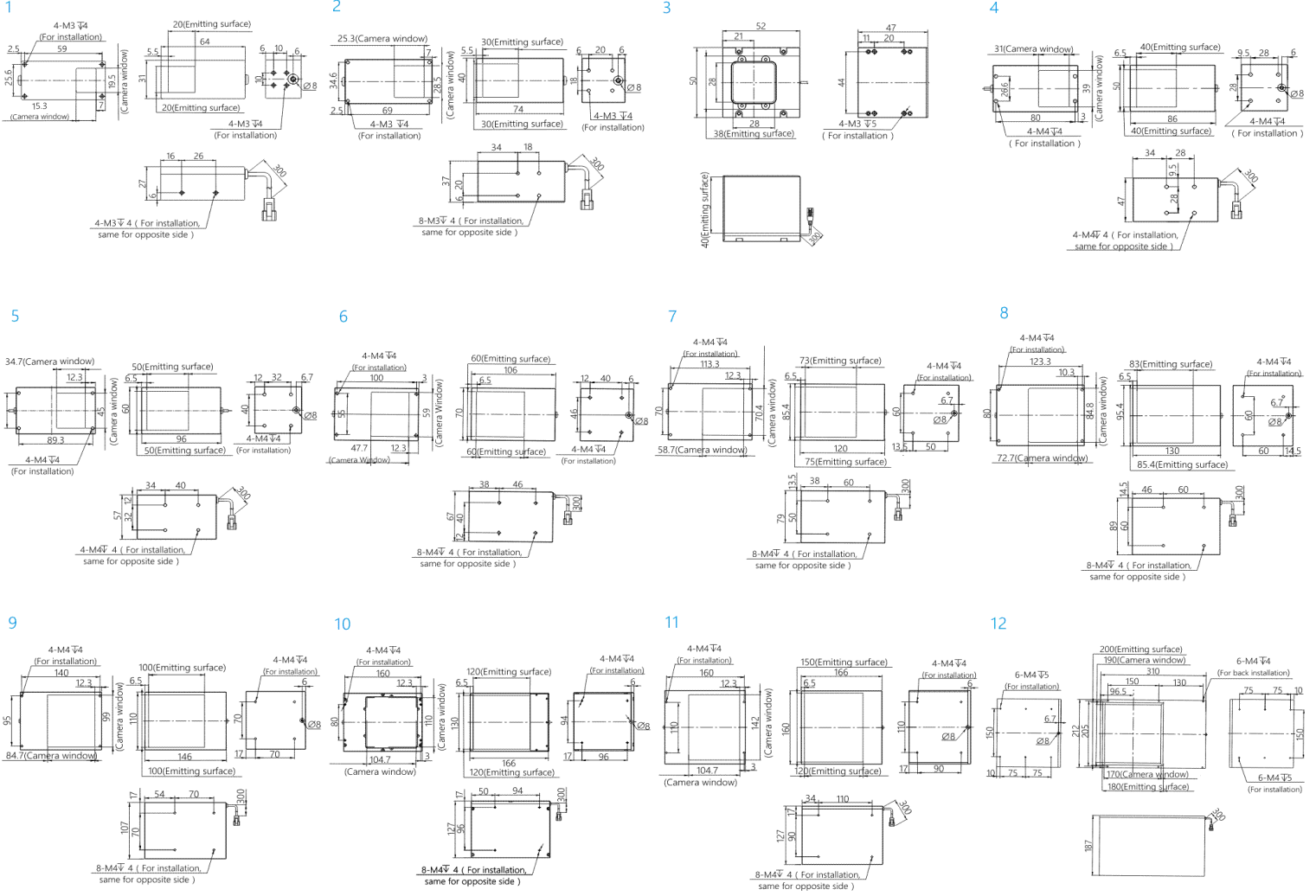
### Selection guide

LED1-CO	-	50	R	-	D
Model		Emitting Area	LED1-Color		Plug-in LED

Series	Model	Optical	Electric			Dimension	Price (Euro)	
		Emitting area (mm)	Voltage (V)	Power (W)				L x W x H (mm)
				●	○	●		
1	LED1-CO-20	20X20	24	2,2	2,1	64X31X27	€ 214,00	
2	LED1-CO-30	30X30	24	1,8	2,5	74X40X37	€ 230,00	
4	LED1-CO-40	40X40	24	2,7	3,7	86X50X47	€ 258,00	
5	LED1-CO-50	50X50	24	5,3	6,1	96X60X57	€ 310,00	
6	LED1-CO-60	60X60	24	7,2	9,8	106X70X67	€ 364,00	
7	LED1-CO-70	75X73	24	10,1	12,0	120X85.4X79	€ 494,00	
8	LED1-CO-80	85X83	24	13,2	17,1	130X95.4X89	€ 534,00	
9	LED1-CO-100	100X100	24	17,7	26,8	146X110X107	€ 592,00	
10	LED1-CO-120	120X120	24	21,2	27,0	166X130X127	€ 722,00	
11	LED1-CO-150X120	150X120	24	22,5	20,7	166X160X127	€ 960,00	
12	LED1-CO-200X180	200X180	24	24,2	25,2	310X212X187	€ 2.446,00	

\* The power tolerance is +/-10%.

## LED1-CO Dimensions (mm)



## Coaxial Lights, LED1-COL series

Extend version of Coaxial light which allow camera to be mount at 90° against light reflect from object.  
This illumination is suitable for limited camera mounting distances.

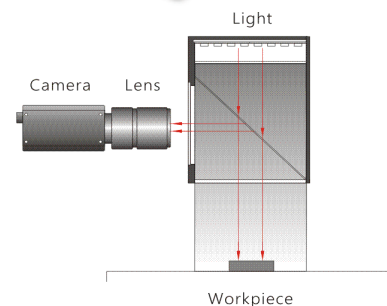
### Applications:

Scratch or damage inspection on/of glossy, shiny or mirror components and surfaces.  
Mark point position on FPC.



### Selection guide

LED1-COL	-	50	R
Model		Emitting area	LED1-Color



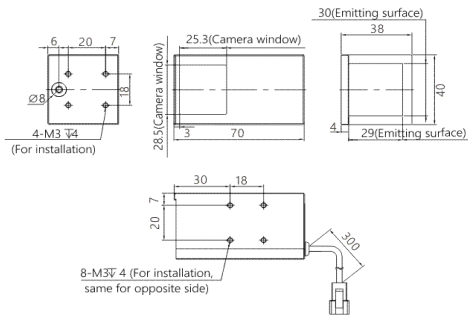
Series	Model	Emitting area (mm)	Voltage (V)	Power (W)			Dimension L x W x H (mm)	Price (Euro)
				●	○ ● ●	● ●		
1	LED1-COL-30	30X29	24	1,7	2,2	70X40X38	€ 310	
2	LED1-COL-50	50X49	24	5,5	5,5	91X60X58	€ 410	
3	LED1-COL-60	60X60	24	6,1	12,1	101X70X68	€ 460	
4	LED1-COL-70	75X73	24	7,8	14,4	115X85.4X80	€ 610	

\*1 The power tolerance is +/-10%.

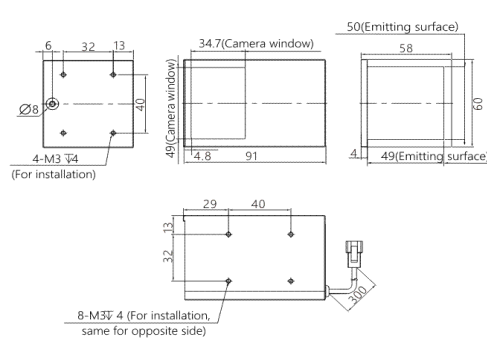


## LED1-COL Dimensions (mm)

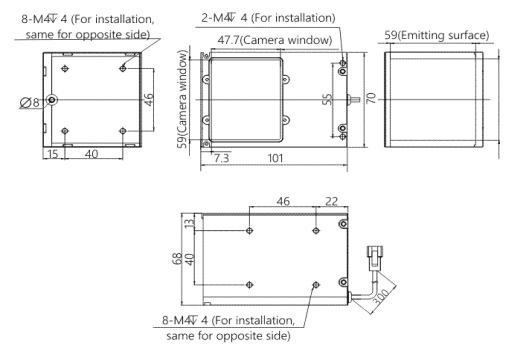
1



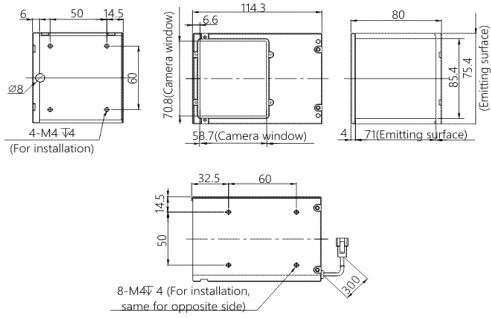
2



3



4



## Bottom lit backlights, LED1-FL series

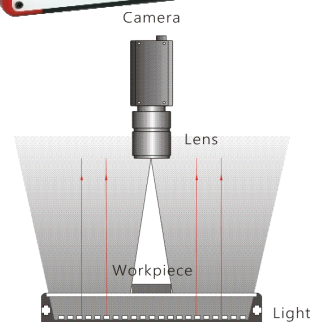
High density surface-mounted LED mount on the bottom to get a more homogeneous high output illumination. It is advised to select a backlight that has at least a 10% larger emitting area than the Field of View of the camera.

### Applications:

Dimension measuring, foreign material inspections, Liquid level inspection, Edge burr inspection.

### Selection guide

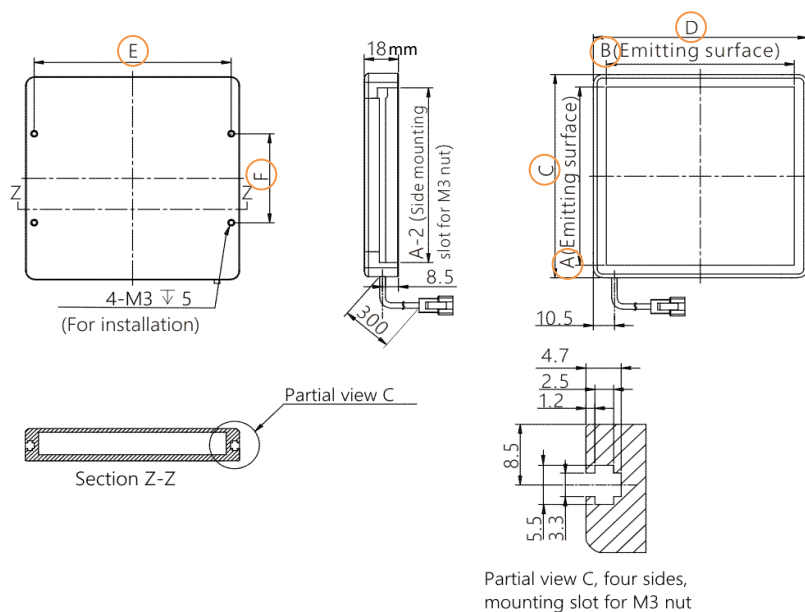
LED1-FL	-	100	X	100	R
Model		Emitting length		Emitting width	Color



No.	Model	Optical		Electric			Dimension L x W x H (mm)	Price (Euro)
		Emitting area (mm)	Working Distance	Voltage (V)	Power (W) *			
					●	○	●	
1	LED1-FL-27X27	27X27		24	1,1	2,8	41X41X18	€ 142,00
2	LED1-FL-43X35	43X35		24	1,9	2,8	57X49X18	€ 156,00
3	LED1-FL-51X51	51X51		24	4,2	4,4	65X65X18	€ 170,00
4	LED1-FL-63X60	63X60		24	4,1	5,1	77X74X18	€ 200,00
5	LED1-FL-83X75	83X75		24	5,5	5,2	97X89X18	€ 230,00
6	LED1-FL-100X100	100X100		24	9,5	10,0	114X114X18	€ 286,00
7	LED1-FL-140X105	140X105		24	13,8	13,9	154X119X18	€ 352,00
8	LED1-FL-160X120	160X120		24	16,6	17,4	174X134X18	€ 418,00
9	LED1-FL-200X50	200X50		24	9,9	20,0	214X64X18	€ 602,00
10	LED1-FL-200X150	200X150		24	28,8	30,2	214X164X18	€ 578,00
11	LED1-FL-224X170	224X170		24	30,2	33,7	238X184X18	€ 696,00
12	LED1-FL-211X200	211X200		24	24,2	24,2	225X214X18	€ 710,00

\* The power tolerance is +/-10%.

## LED1-FL Dimensions (mm)



Index Model	Size ( mm )					
	A	B	C	D	E	F
1	27	27	41	41	32	18
2	43	35	57	49	40	18
3	51	51	65	65	56	18
4	63	60	77	74	65	25
5	83	75	97	89	80	50
6	100	100	114	114	105	50
7	140	105	154	119	110	80
8	160	120	174	134	125	80
9	200	50	214	64	55	80
10	200	150	214	164	155	80
11	224	170	238	184	175	80
12	211	200	225	214	205	80

## Bottom lit parallel backlights, LED1-FLP series

High density surface-mounted LED mount on the bottom.

It illuminates diffuse light evenly at high output.

Special light guide plate providing parallel light.

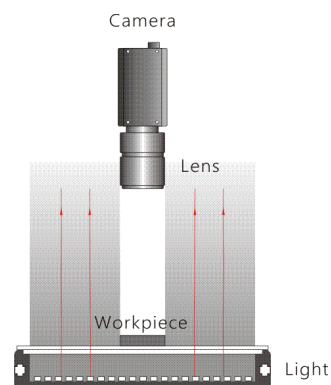
### Applications:

Contour and dimension measurement, foreign material inspections, Liquid level inspection, Edge burr inspection.



### Selection guide

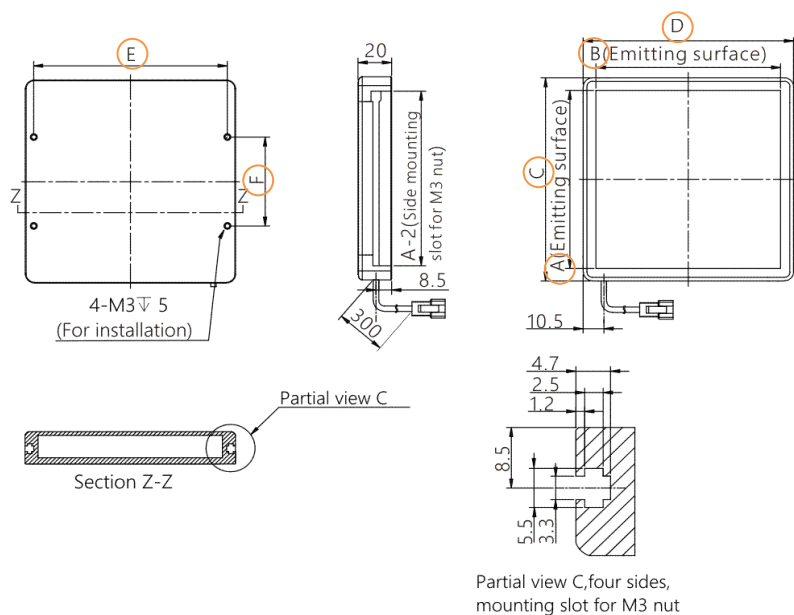
LED1-FLP	-	100	X	100	R
Model		Emitting length		Emitting width	Color



Series	Model	Optical		Electric			Dimension L x W x H (mm)	Price (Euro)
		Emitting area (mm)	Working Distance	Voltage (V)	Power (W)			
					●	○	●	
1	LED1-FLP-27X27	27X27		24	1,1	2,8	41X41X20	on request
2	LED1-FLP-43X35	43X35		24	1,9	2,8	57X49X20	on request
3	LED1-FLP-51X51	51X51		24	4,2	4,4	65X65X20	on request
4	LED1-FLP-63X60	63X60		24	4,1	5,1	77X74X20	on request
5	LED1-FLP-83X75	83X75		24	5,5	5,2	97X89X20	on request
6	LED1-FLP-100X100	100X100		24	9,5	10,0	114X114X20	on request
7	LED1-FLP-140X105	140X105		24	13,8	13,9	154X119X20	on request
8	LED1-FLP-160X120	160X120		24	16,6	17,4	174X134X20	on request
9	LED1-FLP-200X50	200X50		24	9,9	20,0	214X64X20	on request
10	LED1-FLP-200X150	200X150		24	28,8	30,2	214X164X20	on request
11	LED1-FLP-224X170	224X170		24	30,2	33,7	238X184X20	on request
12	LED1-FLP-211X200	211X200		24	24,2	24,2	225X214X20	on request

\*The power tolerance is +/-10%.

### LED1-FLP Dimensions (mm)



Model \ Index	Size ( mm )					
	A	B	C	D	E	F
1	27	27	41	41	32	18
2	43	35	57	49	40	18
3	51	51	65	65	56	18
4	63	60	77	74	65	25
5	83	75	97	89	80	50
6	100	100	114	114	105	50
7	140	105	154	119	110	80
8	160	120	174	134	125	80
9	200	50	214	64	55	80
10	200	150	214	164	155	80
11	224	170	238	184	175	80
12	211	200	225	214	205	80

## Side Backlights, LED1-FLS series

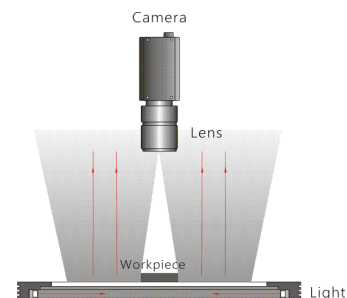
LED are placed around four sides. On top a light - guiding diffusion plate. It illuminate uniformed light at large area. Ultrathin design.

### Applications:

Dimension measuring, foreign material inspections, Liquid level inspection, Edge burr inspection.

### Selection guide

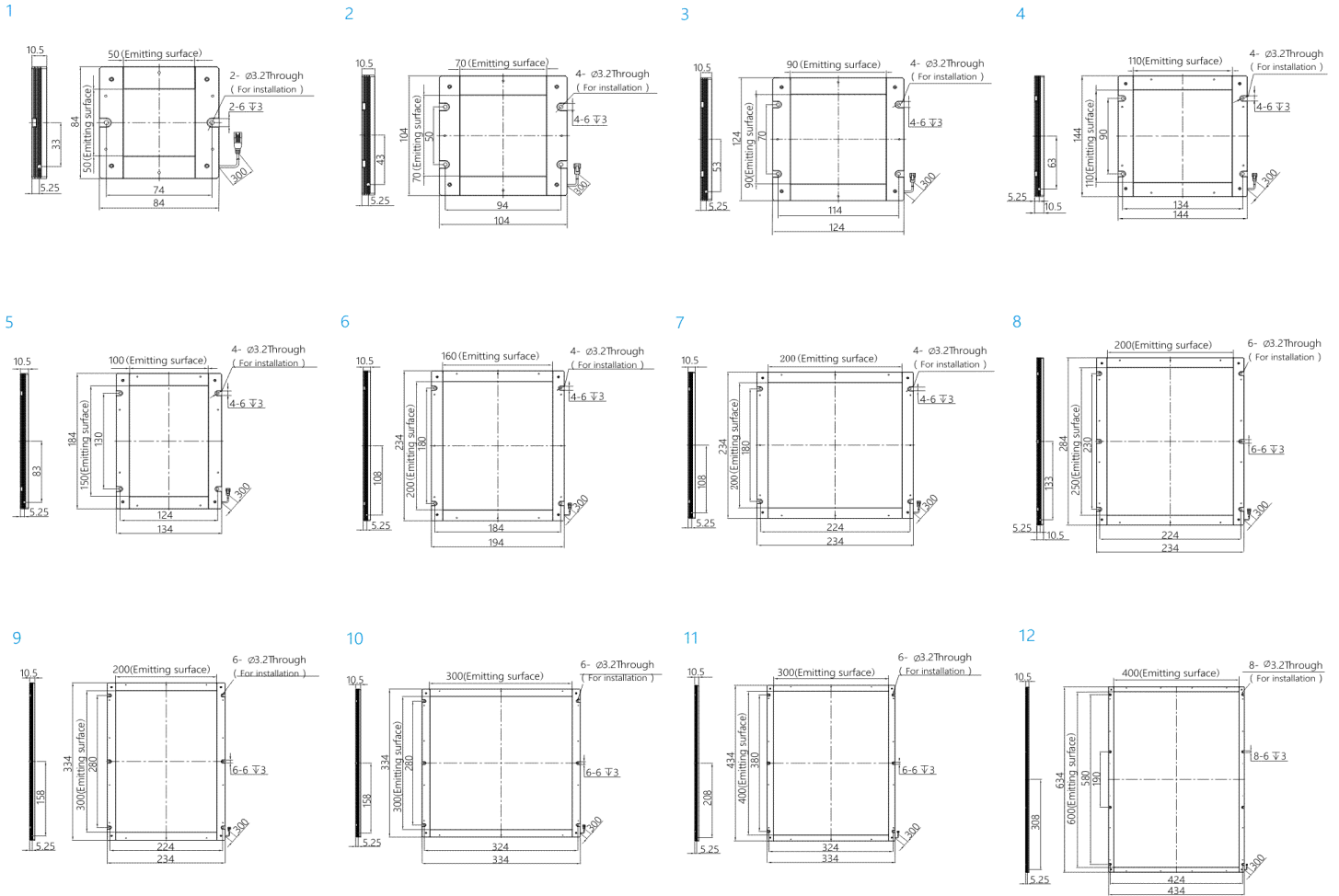
LED1-FLS	-	100	X	100	R
Model		Emitting length		Emitting width	Color



Series	Model	Optical		Electric			Dimension L x W x H (mm)	Price (Euro)
		Working Distance	Emitting area L x W(mm)	Voltage (V)	Power (W)			
					●	○	●	
1	LED1-FLS-50X50		50x50	24	3	10,9	84x84x10.5	€ 160,00
2	LED1-FLS-70X70		70x70	24	5,9	7,9	104x104x10.5	€ 190,00
3	LED1-FLS-90X90		90x90	24	6,3	12,6	124x124x10.5	€ 220,00
4	LED1-FLS-110X110		110x110	24	6,8	12,6	144x144x10.5	€ 248,00
5	LED1-FLS-150X100		150x100	24	4,4	10,0	184x134x10.5	€ 304,00
6	LED1-FLS-200X160		200x160	24	6,5	12,1	234x194x10.5	€ 342,00
7	LED1-FLS-200X200		200x200	24	6,7	26,3	234x234x10.5	€ 396,00
8	LED1-FLS-250X200		250x200	24	7,5	16,8	284x234x10.5	€ 382,00
9	LED1-FLS-300X200		300x200	24	8,2	16,6	334x234x10.5	€ 422,00
10	LED1-FLS-300X300		300x300	24	15,5	35,0	334x334x10.5	€ 502,00
11	LED1-FLS-400X300		400x300	24	12,3	24,0	434x334x10.5	€ 488,00
12	LED1-FLS-600X400		600x400	24	14,6	36,3	634x434x10.5	€ 608,00

\*The power tolerance is +/-10%.

## LED1-FLS Dimensions (mm)



## Parallel Backlights, LED1-FLSP series

Special light guide plate providing parallel light.  
Designed for high-accuracy measurement of large parts.

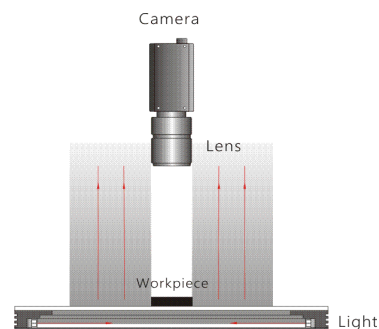
### Applications:

Dimension measuring, foreign material inspections,  
liquid level inspection, edge burr inspection.



### Selection guide

LED1-FLSP	-	100	X	100	R
Model		Emitting length		Emitting width	Color

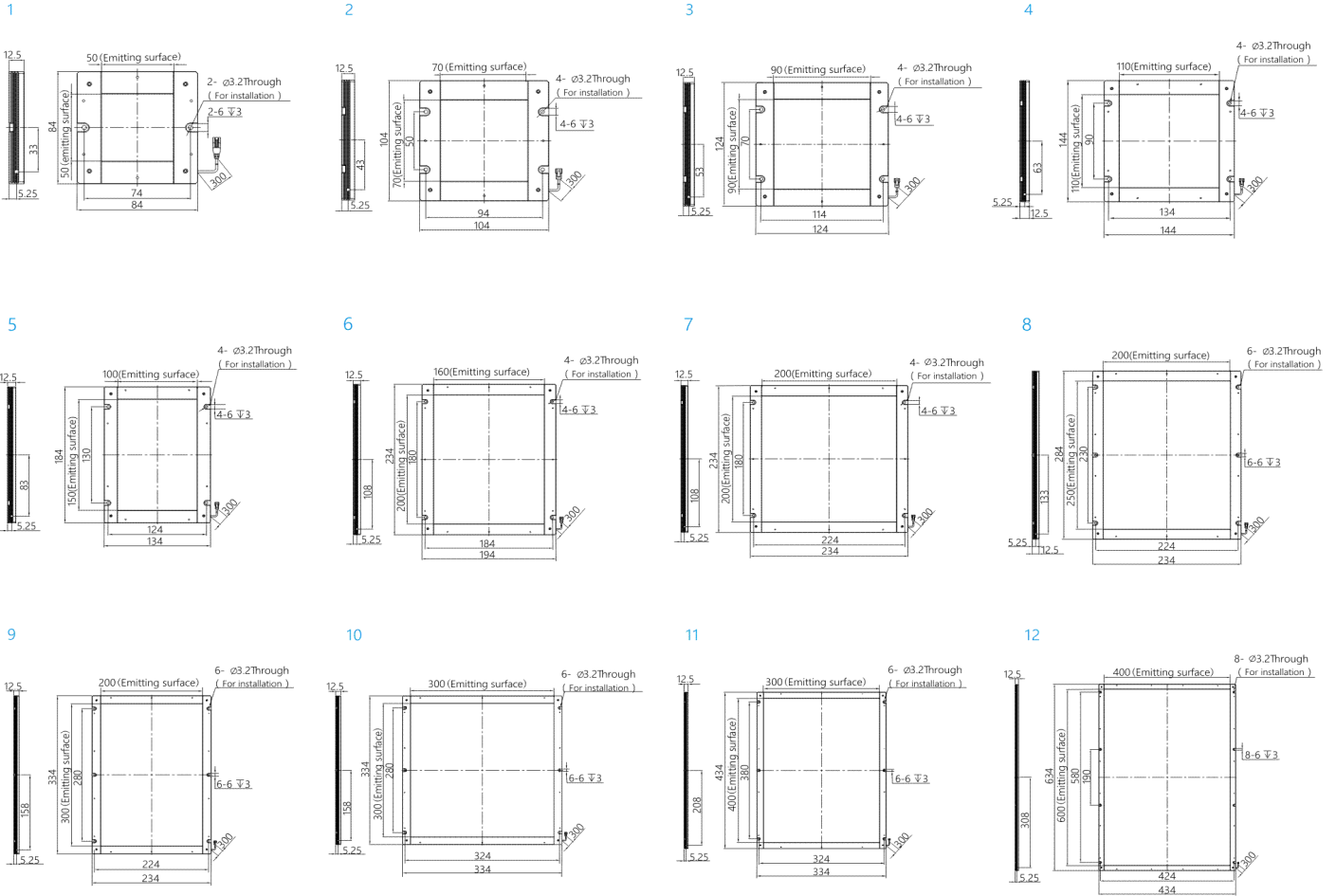


Series	Model	Optical		Electric			Dimension L x W x H (mm)	Price (Euro)
		Working distance	Emitting area L x W(mm)	Voltage (V)	Power (W)			
					●	○	●	
1	LED1-FLSP-50X50		50x50	24	3,0	10,9	84x84x12.5	€ 174,00
2	LED1-FLSP-70X70		70x70	24	5,9	7,9	104x104x12.5	€ 190,00
3	LED1-FLSP-90X90		90x90	24	6,3	12,6	124x124x12.5	€ 220,00
4	LED1-FLSP-110X110		110x110	24	6,8	12,6	144x144x12.5	on request
5	LED1-FLSP-150X100		150x100	24	4,4	10,0	184x134x12.5	€ 402,00
6	LED1-FLSP-200X160		200x160	24	6,5	12,1	234x194x12.5	on request
7	LED1-FLSP-200X200		200x200	24	6,7	26,3	234x234x12.5	€ 470,00
8	LED1-FLSP-250X200		250x200	24	7,5	16,8	284x234x12.5	on request
9	LED1-FLSP-300X200		300x200	24	8,2	16,6	334x234x12.5	on request
10	LED1-FLSP-300X300		300x300	24	15,5	35,0	334x334x12.5	€ 640
11	LED1-FLSP-400X300		400x300	24	12,3	24	434x334x12.5	on request
12	LED1-FLSP-600X400		600x400	24	14,6	36,3	634x434x12.5	on request

\* The power tolerance is +/-10%.



## LED1-FLSP Dimensions (mm)



## Direct Side Backlights, LED1-FLH series

Used in direct, uniform and large area illumination systems.

It allows a flexible installation at different working distances, or as diffuse front light.

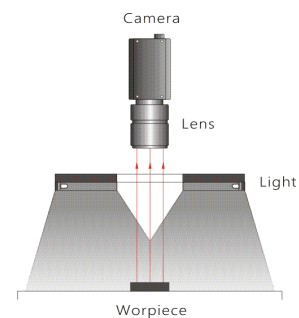
The size, quantity and location of hole can be customized.

### Application:

Printing quality inspection for example, food or drug packaging, PCBA inspection.

### Selection guide

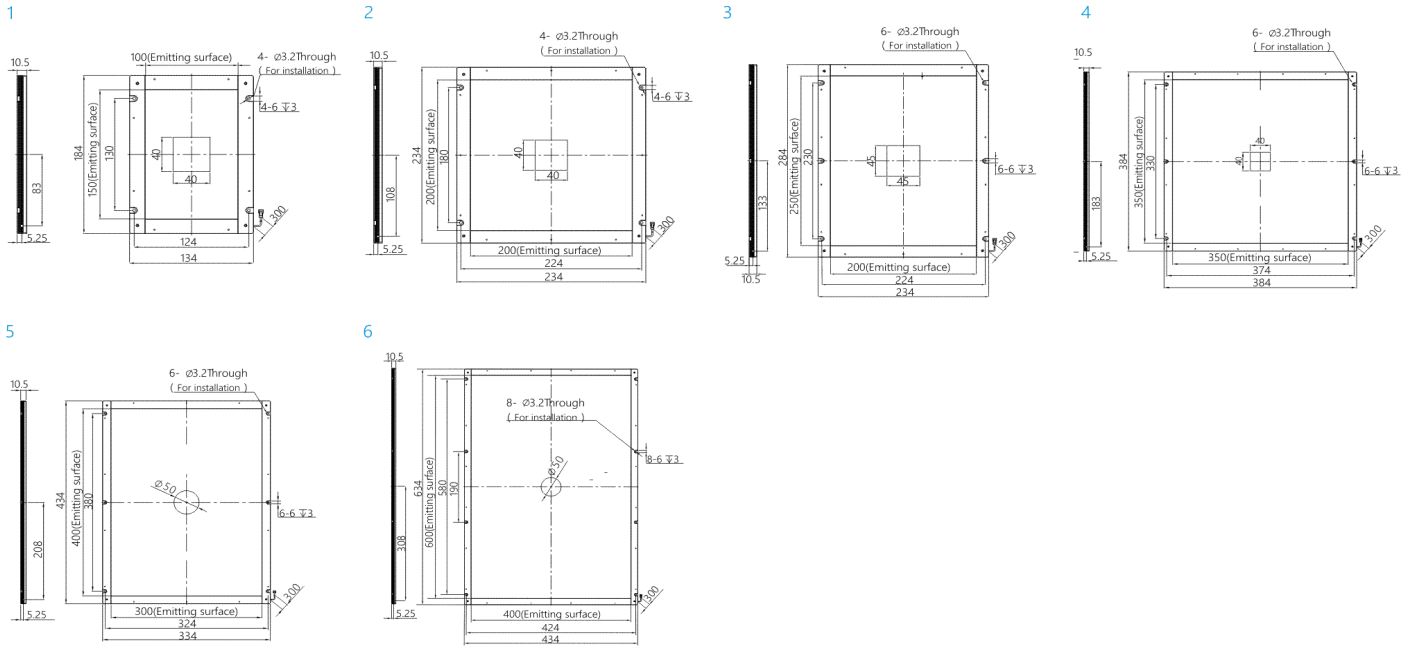
LED1-FLH	-	100	X	100	R
Model		Emitting length		Emitting width	Color



Serie	Model	Optical			Electric			Dimension L x W x H (mm)	Price (Euro)
		Working Distance	Emitting area L x W(mm)	Central hole (mm)	Voltage (V)	Power (W)			
						●	○	●	
1	LED1-FLH-150X100		150x100	40x40	24	4,2	10,3	184x134x10.5	€ 338,00
2	LED1-FLH-200X200		200x200	40x40	24	16,1	24,0	234x234x10.5	€ 444,00
3	LED1-FLH-250X200		250x200	45x45	24	6,9	16,8	284x234x10.5	€ 416,00
4	LED1-FLH-350X350		350x350	40x40	24	20,7	36,7	384x384x10.5	€ 734,00
5	LED1-FLH-400X300		400x300	Ø50	24	11,5	24,0	434x334x10.5	€ 544,00
6	LED1-FLH-600X400		600x400	Ø50	24	12,1	36,0	634x434x10.5	€ 672,00

\* The power tolerance is +/-10%.

## LED1-FLH Dimensions (mm)



## Dome Lights, LED1-DL series

High uniform diffuse circular front light.

Optimal for reflective circular surfaces inspection and other glossy applications.

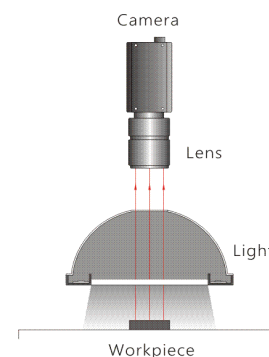
### Applications:

Vision/text/color determination or inspection of glossy, curved or uneven surfaces as on circuit boards.



### Selection guide

LED1-DL	-	100	R
Model		Outer diameter	Color

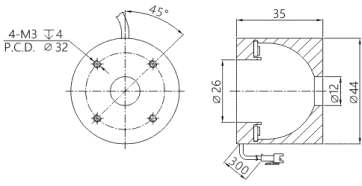


No.	Model	Optical		Electric			Dimension OD X Height (mm)	Price (Euro)
		Emitting diameter (mm)	Inner Diameter	Voltage (V)	Power (W)			
					●	○ ● ●		
1	LED1-DL-44	26	12	24	2,6	6,6	44X35	€ 306,00
2	LED1-DL-70	45	12	24	2,2	3,7	70X32	€ 330,00
3	LED1-DL-100	66	25	24	7,9	13,8	116X57	€ 414,00
4	LED1-DL-120	84	35	24	10,0	16,6	134X62.5	€ 498,00
5	LED1-DL-150	116	35	24	13,7	22,1	166X82	€ 526,00
6	LED1-DL-180	138	30	24	16,0	25,9	198X90	€ 616,00
7	LED1-DL-250	216	50	24	25,9	40,3	266X130	€ 922,00
8	LED1-DL-300	250	55	24	34,2	51,8	300X146	€ 1440,00

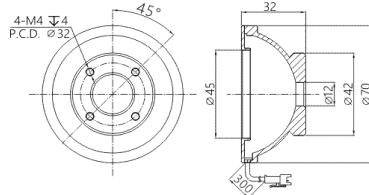
\* The power tolerance is +/-10%.

**LED1-DL Dimensions (mm)**

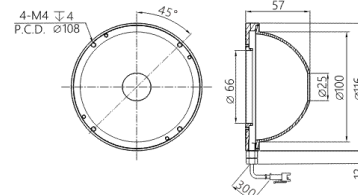
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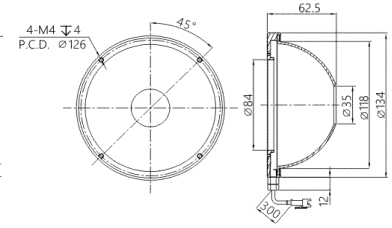
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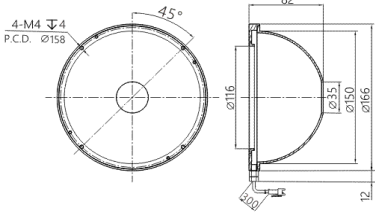
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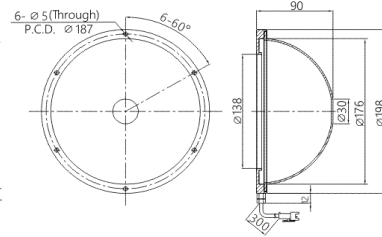
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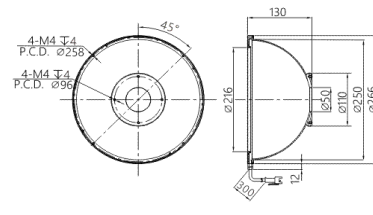
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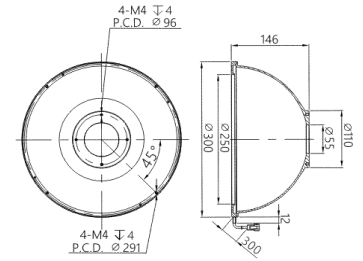
6



7



8

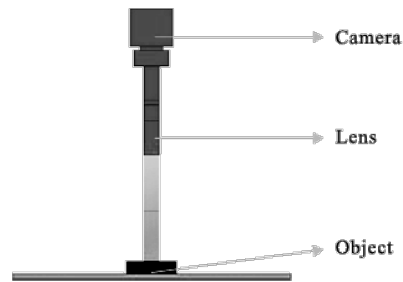


## Industrial LED-spot

This LED spot is compatible with our telecentric lenses which have the option of coaxial light input.

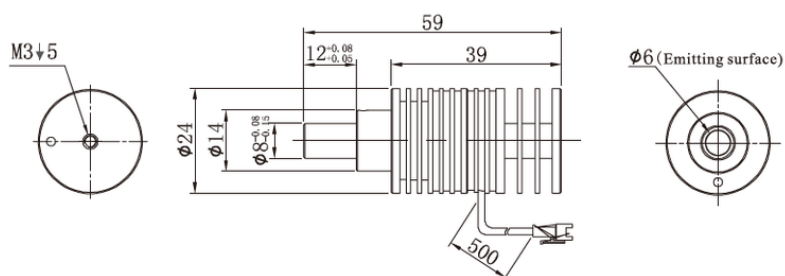
### Applications:

Applications where telecentric lenses with coaxial inputs are used. The light spot can also be used to illuminate small objects.



No.	Model	Optical		Electric			Dimension OD X Height (mm)	Price (Euro)
		Emitting diameter (mm)	Diameter of head	Voltage (V)	Power (W)			
					○	● ● ●		
1	LED2-SPOT-12V-3W-WHITE	6	8	12	3	On request	24X59	€ 249,00

### LED2-SPOT-12V-3W-WHITE Dimensions (mm)



## Line scan Barlight Standard

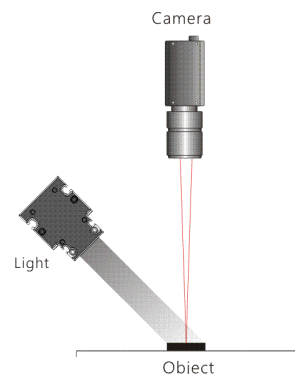
High speed large format linear lighting

### Applications:

Line scan applications.

### Selection guide:

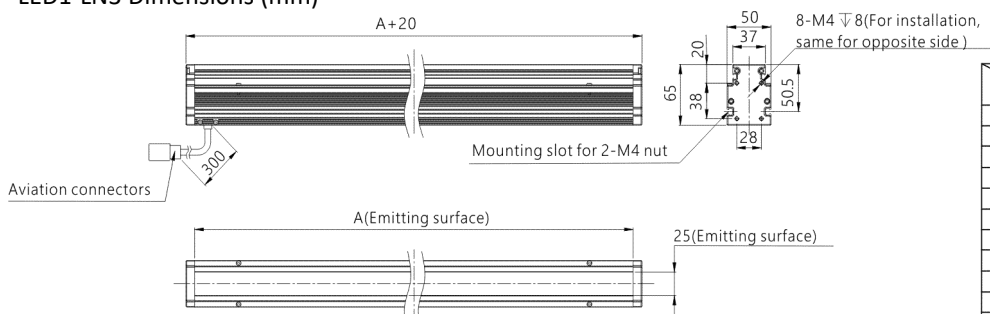
LED1-LN3	-	500	W
Model		Emitting length	Color



No.	Model	Optical			Electrical		Size	Price (euro)
		Color		Emitting field(mm)	Voltage	Power (w)*	L X W X H (mm)	
1	LED1-LN3-100W	○		100X25	48	14,7	120 X 50 X 65	on request
2	LED1-LN3-200W	○		200X25	48	27,3	220 X 50 X 65	on request
3	LED1-LN3-300W	○		300X25	48	37,8	320 X 50 X 65	€ 804
4	LED1-LN3-400W	○		400X25	48	48,3	420 X 50 X 65	on request
5	LED1-LN3-500W	○		500X25	48	58,8	520 X 50 X 65	€ 992
6	LED1-LN3-600W	○		600X25	48	69,3	620 X 50 X 65	on request
7	LED1-LN3-700W	○		700X25	48	77,7	720 X 50 X 65	on request
8	LED1-LN3-800W	○		800X25	48	86,1	820 X 50 X 65	€ 1390
9	LED1-LN3-900W	○		900X25	48	94,5	920 X 50 X 65	on request
10	LED1-LN3-1000W	○		1000X25	48	102,9	1020 X 50 X 65	€ 1680
11	LED1-LN3-1100W	○		1100X25	48	111,3	1120 X 50 X 65	€1804
12	LED1-LN3-1200W	○		1200X25	48	119,7	1220 X 50 X 65	on request
13	LED1-LN3-1300W	○		1300X25	48	128,1	1320 X 50 X 65	on request
14	LED1-LN3-1400W	○		1400X25	48	136,5	1420 X 50 X 65	on request
15	LED1-LN3-1500W	○		1500X25	48	144,9	1520 X 50 X 65	€ 2240

\* The power tolerance is +/-10%.

### LED1-LN3 Dimensions (mm)



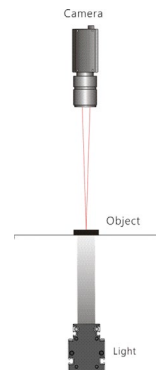
Index Model	Size (mm)		Power (w)	Weight (kg)
	A	R	W/G/B	
LN3-100W	100		14.7	0.5
LN3-200W	200		27.3	0.9
LN3-300W	300		37.8	1.3
LN3-400W	400		48.3	1.6
LN3-500W	500		58.8	1.9
LN3-600W	600		69.3	2.3
LN3-700W	700		77.7	2.8
LN3-800W	800		86.1	3.2
LN3-900W	900		94.5	3.6
LN3-1000W	1000		102.9	3.9
LN3-1100W	1100		111.3	4.3
LN3-1200W	1200		119.7	4.8
LN3-1300W	1300		128.1	5.1
LN3-1400W	1400		136.5	5.5
LN3-1500W	1500		144.9	5.9

## Line Scan Barlight Uniform

High speed large format linear lighting

### Applications:

Line scan applications.



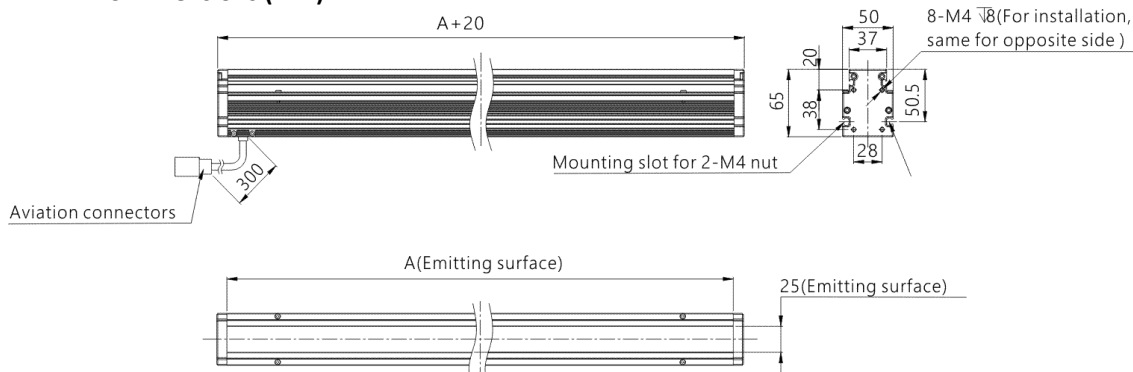
### Selection guide

LED1-LN3	-	500	W	-	DF
Model		Emitting length	Color		Diffuser

No.	Model	Optical			Electrical		Size L X W X H (mm)	Price (euro)
		Color		Emitting field (mm)	Voltage	Power (w)*		
1	LED1-LN3-100W-DF	○		100X25	48	14,7	120 X 50 X 65	on request
2	LED1-LN3-200W-DF	○		200X25	48	27,3	220 X 50 X 65	on request
3	LED1-LN3-300W-DF	○		300X25	48	37,8	320 X 50 X 65	€ 836
4	LED1-LN3-400W-DF	○		400X25	48	48,3	420 X 50 X 65	on request
5	LED1-LN3-500W-DF	○		500X25	48	58,8	520 X 50 X 65	€ 992
6	LED1-LN3-600W-DF	○		600X25	48	69,3	620 X 50 X 65	on request
7	LED1-LN3-700W-DF	○		700X25	48	77,7	720 X 50 X 65	on request
8	LED1-LN3-800W-DF	○		800X25	48	86,1	820 X 50 X 65	€ 1390
9	LED1-LN3-900W-DF	○		900X25	48	94,5	920 X 50 X 65	on request
10	LED1-LN3-1000W-DF	○		1000X25	48	102,9	1020 X 50 X 65	on request
11	LED1-LN3-1100W-DF	○		1100X25	48	111,3	1120 X 50 X 65	on request
12	LED1-LN3-1200W-DF	○		1200X25	48	119,7	1220 X 50 X 65	on request
13	LED1-LN3-1300W-DF	○		1300X25	48	128,1	1320 X 50 X 65	on request
14	LED1-LN3-1400W-DF	○		1400X25	48	136,5	1420 X 50 X 65	on request
15	LED1-LN3-1500W-DF	○		1500X25	48	144,9	1520 X 50 X 65	€ 2240

\* The power tolerance is +/-10%.

### LED1-LN3 Dimensions (mm)



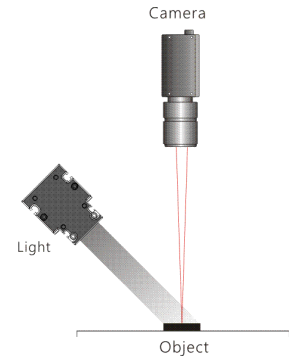


## Line Scan Barlight High Power

High speed large format linear lighting

### Applications:

Line scan applications.



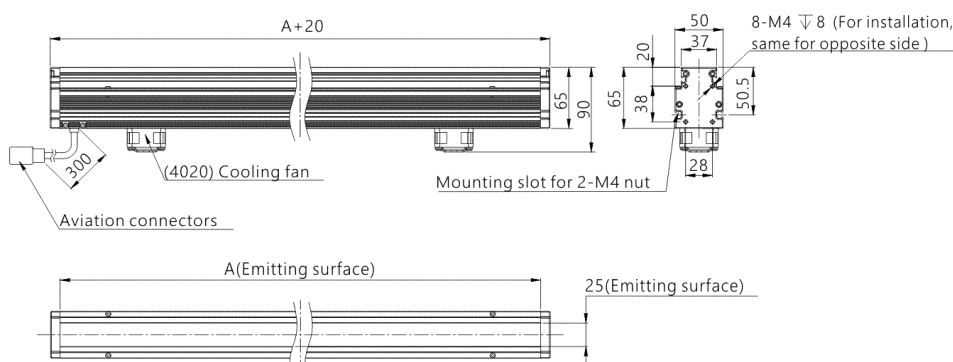
### Selection guide

LED1-LN3	-	500	W	-	DF
Model		Emitting length	Color		Diffuser

No.	Model	Optical			Electrical		Size	Price (Euro)
		Color		Emitting field (mm)	Voltage	Power (w)*	L X W X H (mm)	
1	LED1-LN3-100W-FN	○		100X25	48	29,4	120 X 50 X 90	€ 732
2	LED1-LN3-200W-FN	○		200X25	48	54,6	220 X 50 X 90	on request
3	LED1-LN3-300W-FN	○		300X25	48	75,6	320 X 50 X 90	€ 1078
4	LED1-LN3-400W-FN	○		400X25	48	96,6	420 X 50 X 90	on request
5	LED1-LN3-500W-FN	○		500X25	48	117,6	520 X 50 X 90	€ 1328
6	LED1-LN3-600W-FN	○		600X25	48	138,6	620 X 50 X 90	on request
7	LED1-LN3-700W-FN	○		700X25	48	155,4	720 X 50 X 90	on request
8	LED1-LN3-800W-FN	○		800X25	48	172,2	820 X 50 X 90	€ 1776
9	LED1-LN3-900W-FN	○		900X25	48	189	920 X 50 X 90	on request
10	LED1-LN3-1000W-FN	○		1000X25	48	205,8	1020 X 50 X 90	€ 1680
11	LED1-LN3-1100W-FN	○		1100X25	48	222,6	1120 X 50 X 90	on request
12	LED1-LN3-1200W-FN	○		1200X25	48	239,4	1220 X 50 X 90	on request
13	LED1-LN3-1300W-FN	○		1300X25	48	256,2	1320 X 50 X 90	on request
14	LED1-LN3-1400W-FN	○		1400X25	48	273	1420 X 50 X 90	on request
15	LED1-LN3-1500W-FN	○		1500X25	48	289,8	1520 X 50 X 90	€ 2820

\* The power tolerance is +/-10%.

### LED1-LN3 Dimensions (mm)



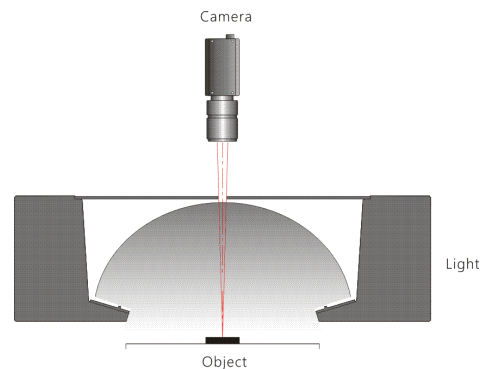
## Line Scan Dome / Tunnel light

Linear diffuse lighting

It can be applied to the large format print appearance inspection

### Applications:

Line scan applications.



### Selection guide

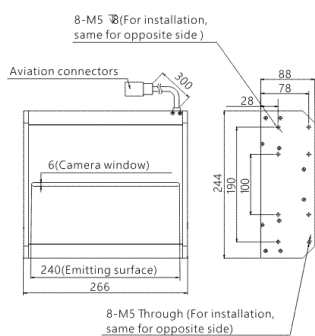
LED1-C-TLN	-	250	W
Model		emitting length	Color

No.	Model	Optical			Electrical		Size	Price (euro)
		Color		Camera hole (mm)	Voltage	Power (w)*	L X W X H (mm)	
1	LED1-C-TLN-250W-JM	○		240X6	48	100	266X244X88	on request
2	LED1-C-TLN-300W-RF	○		290X6	48	120	316X244X88	€ 1192
3	LED1-C-TLN-400W-RF	○		390X6	48	130	416X244X88	on request
4	LED1-C-TLN-500W-RF	○		490X6	48	200	516X244X88	on request
5	LED1-C-TLN-650W-ZHC	○		650X8	48	160	680X244X88	on request
6	LED1-C-TLN-800W-ZHC	○		800X8	48	200	830X244X88	€ 3200

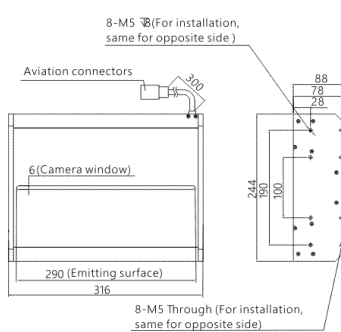
\* The power tolerance is +/-10%.

### LED1-C-TLN Dimensions (mm)

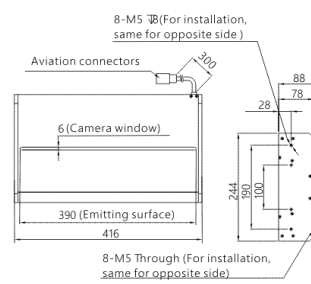
1



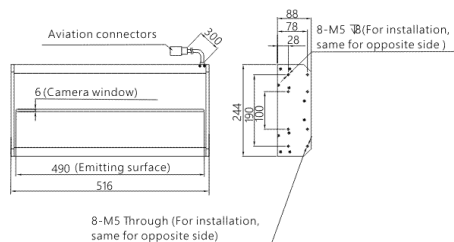
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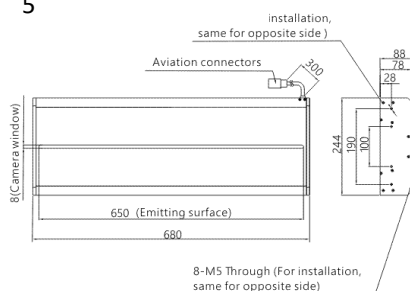
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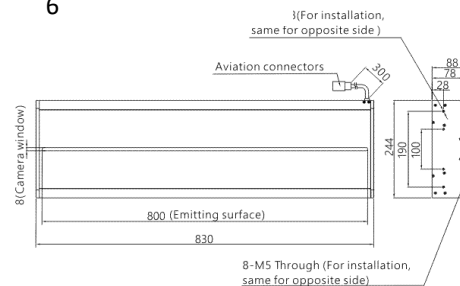
4



5



6



## Line Scan Coaxial Light

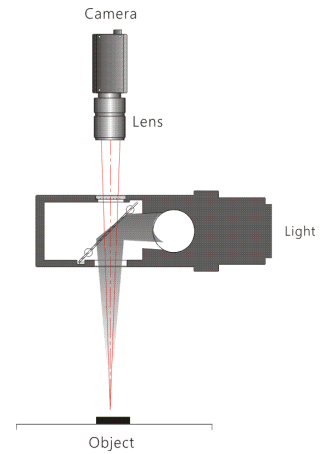
High speed large format linear lighting

### Applications:

Line scan applications.

### Selection guide

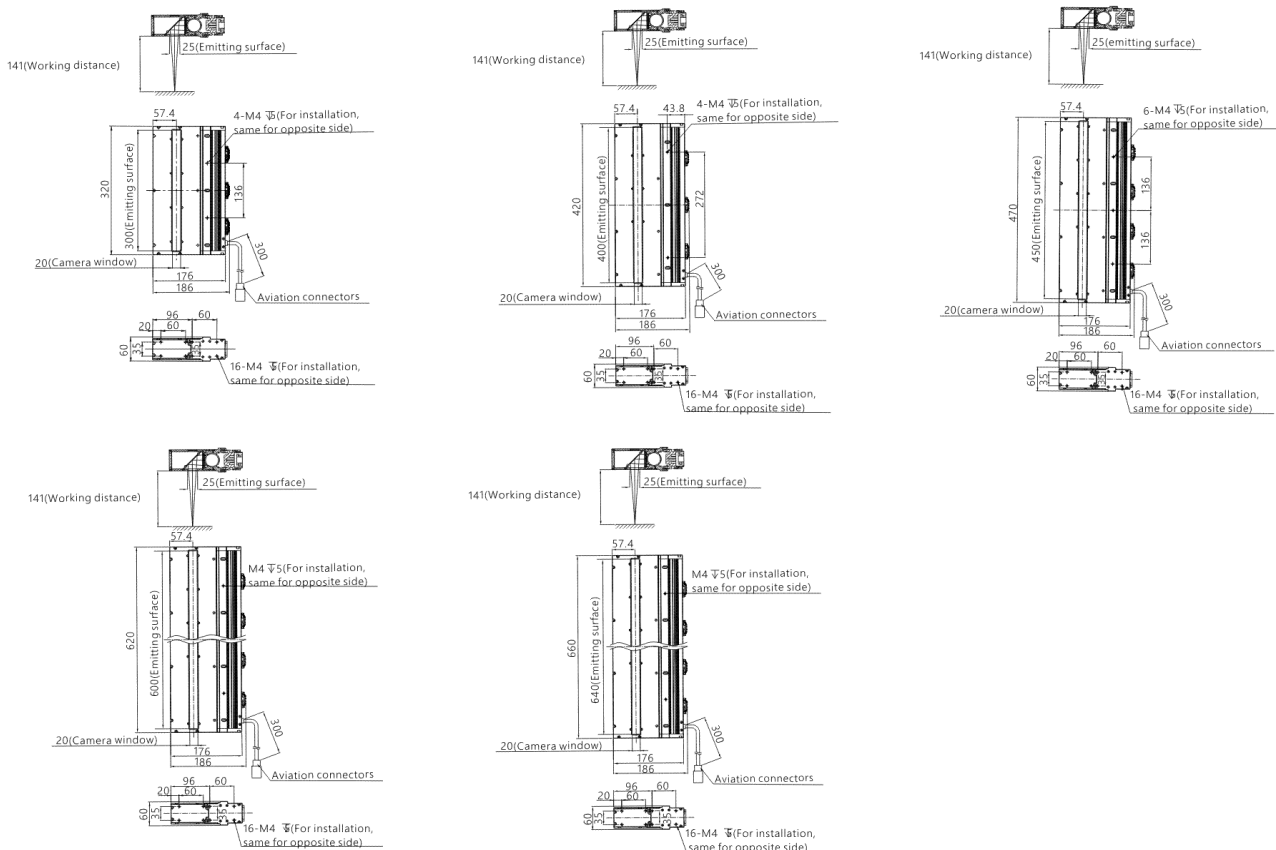
LED1-COLN	-	300	W	-	FN
Model		Emitting length	Color		Fan



No.	Model	Optical			Electrical		Size L X W X H (mm)	Price (euro)
		Color		Emitting field (mm)	Voltage	Power (w)*		
1	LED1-COLN-300W-FN	○		300X25	48	110	320X186X60	€ 2360
2	LED1-COLN-300R-FN	●		300X25	48	70	320X186X60	on request
3	LED1-COLN-300B-FN	●		300X25	48	110	320X186X60	on request
4	LED1-COLN-400W-FN	○		400X25	48	130	420X186X60	on request
5	LED1-COLN-450W-FN	○		450X25	48	170	470X186X60	on request
6	LED1-COLN-600W-FN	○		600X25	48	140	620X186X60	€ 4180
7	LED1-COLN-640W-FN	○		640X25	48	150	660X186X60	on request
8	LED1-COLN-640B-FN	●		640X25	48	150	660X186X60	on request

\* The power tolerance is +/-10%.

### LED1-COLN3 Dimensions (mm)



## Digital controller LED1-PS2C-6024-4-Z

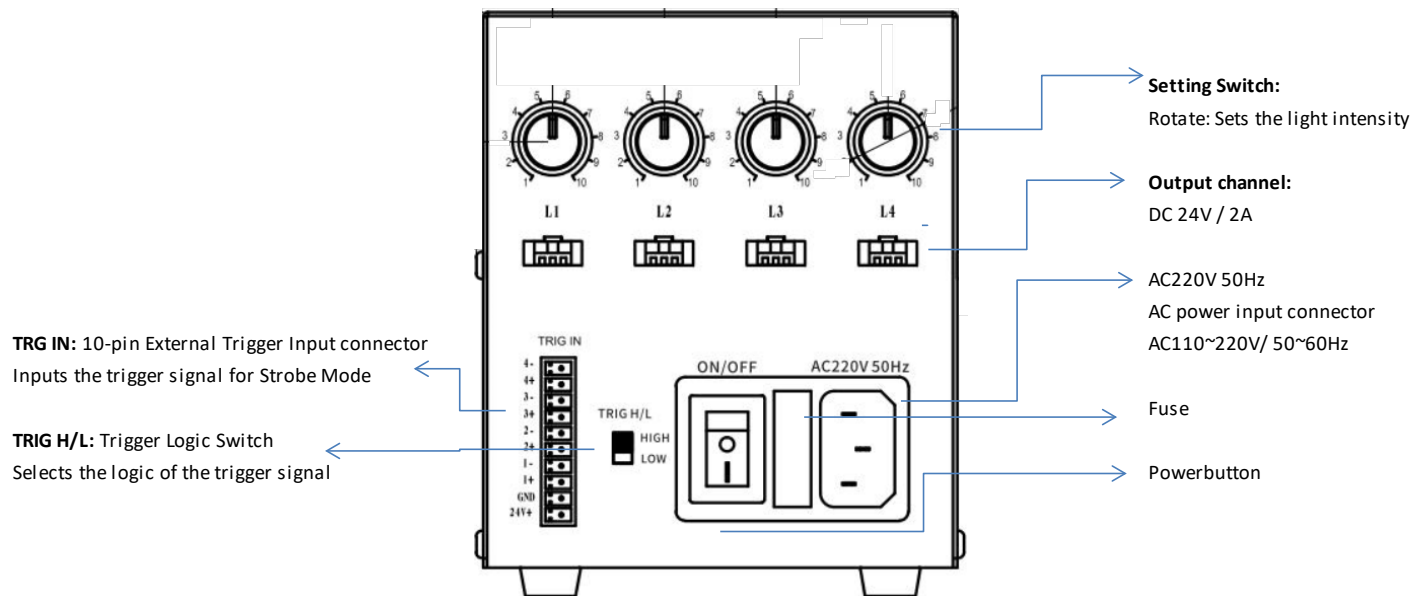
4 channel 60W powersupply for 24V lights

### Characteristics:

1. Stepless light intensity control.
2. External trigger signal input for strobe lighting.
3. DIN rail mounting and bottom screw mounting available.



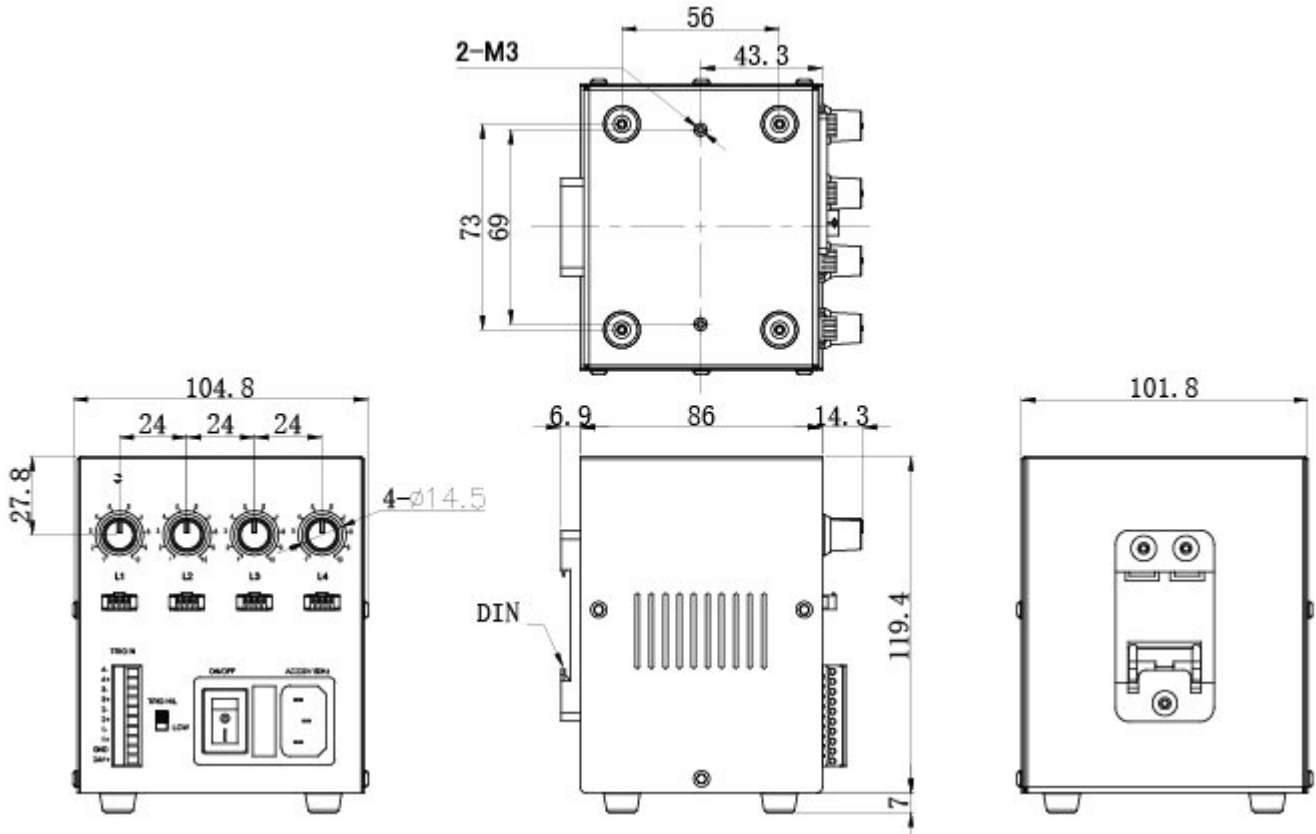
### Controller overview LED1-PS2C-6024-4-Z



**Specifications LED1-PS2C-6024-4-Z**

Model	LED1-PS2C-6024-4-Z
Price	€ 224,--
Lighting Method	Continuous / trigger lighting
Drive method	Constant voltage system
Light control method	Variable voltage control
No. of channels	4
Output voltage (v)	12 – 24 VDC
Output Power in total (W)	60W
Maximum current in single channel (A)	2A
Trigger function	Yes
Trigger input Voltage (v)	DC 5-24V
Trigger delay	<50us
Input voltage (v)	AC 100V-240V
Working Temperature/Humidity	0~40°C / 20~80% RH (with no condensation)
Cooling method	Natural air
Material	Steel plate with painting
Weight (kg)	0.78
Dimension	107X105X126
Accessory	EU or UK power cord (included) Extension cable 1-mtr 24V (+ 6,00) Extension cable 3-mtr 24V (+ 12,00) Extension cable 5-mtr 24V (+ 18,00)

Dimensions LED1-PS2C-6024-4-Z



## Digital controller LED1-PD4-6024-4-Z

4 channel 60W powersupply for 24V lights

### Characteristics:

1. 0~255 steps light intensity control.
2. External trigger signal input for strobe lighting.
3. One EIA-485 communication port can control 100 controllers.
4. RS-232 and EIA-485 communication connector for selection.
5. Can set PWM frequency to avoid rippling.
6. DIN rail mounting and bottom screw mounting available.



### Controller overview LED1-PD4-6024-4-Z

BRT: Brightness control.  
PLS: Strobe Control:

#### Digital Window:

Display the setting of the light intensity or the setting of the lighting mode.

Lock lit: the settings are locked

The Light Units are turned ON for the period of time set on the setting switch after external trigger signal is input.

#### Channel Indicators

L1 lit: Lit when changing settings for

Light Unit connected to output connector L1

L2/3/4 lit: Lit when changing settings for

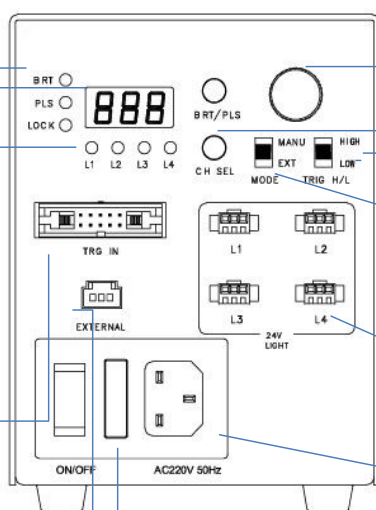
Light Unit connected to output connector L2/3/4

TRG IN: 10-pin External Trigger Input connector

Inputs the trigger signal for Strobe Mode

EXTERNAL: RS232 connector (+ - FG)

Communication portal for PC control



FUSE

#### Setting Switch:

Rotate: Sets the light intensity or lighting mode.

#### CH SEL: Channel Selection Switch

Selects L1, L2, L3, L4.

Press for at least 2 seconds:

Locks the settings.

#### MODE:

MANU - Manual Setting

EXT - External trigger mode.

#### TRIG H/L: Trigger Logic Switch

Selects the logic of the trigger signal

Output channel:

DC 24V / 2A

AC220V 50Hz

AC power input connector

AC110~220V/ 50~60Hz

**Specifications LED1-PD4-6024-4-Z**

Model	LED1-PD4-6024-4-Z
Price	€ 348,--
Lighting Method	Continuous / trigger lighting
Drive method	Continuous / trigger lighting
Light control method	PWM and light time control
No. of channels	4
PWM frequency	62.5KHz, 125KHz, 250KHz, 500KHz
Error detection display	Displayed on front digital display
Over-current protection	Output shutdown: 107% min. of rated load. Reset after turning the power off and on again.
Trigger function	Yes
Input voltage (v)	AC 100V-240V
Trigger input Voltage (v)	DC 5-24V
Output voltage (v)	DC24V
Output Power in total (W)	60W
Maximum current in single channel (A)	2A
ID setting	ID: Software setting (0-99)
Working Temperature/Humidity	0~40°C / 20~80% RH (with no condensation)
Cooling method	Natural air
Material	Steel plate with painting
Weight (kg)	0.72
Dimension	97X106X126
Accessory	EU or UK power cord (included) Extension cable 1-mtr 24V (+ 6,00) Extension cable 3-mtr 24V (+ 12,00) Extension cable 5-mtr 24V (+ 18,00)

Communication specification	
Light intensity control	Manual adjustment 256 steps dimmer knob
	External: EIA-485/RS-232 communication command input
ON/OFF set	External trigger input or EIA-485/RS-232 communication command input
Lighting mode set	Manuel: Dimmer switch in 11 steps
	External:EIA-485/RS-232 communication command input
Failure output	Sending instructions when Output current detection
External control port	Trigger input: 10 / 14 pin MIL connector
	Trigger input: 3 pin e-CON connector
Parallel communication protocol	See instruction



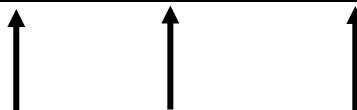
## Serial protocol LED1-PD4-6024-4-Z

### 1. Communication parameter

Protocol	Working mode	Rate	Transport format			
RS-232	Half-duplex	19200bps	Start bit	Data bits	Check bit	Stop bit
			1	8	0	1

### 2. Communication format

Identifier (0X40)	Length LEN	Device CODE	Command code	Channel number	Command Index	Checksum
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Command	Command code	Channel number	Command Index	Remark
Setting ID	0x09		0~99	
Setting PWM	0x11		0~03	0-62.5K, 1-125K, 2-250K, 3-500K
Setting brightness	0x1A	00~03	0~255	
Setting trigger way	0x22	00~03	0~10	0-F00, 1-F01, ....
On/OFF	0x2A	00~03	0~01	0 - Stand for OFF 1- stand for ON
Red index	0x31	00~03		
Device reply CH1	0x5B		Brightness, Trigger, ON/OFF	Device reply one specified channel's index
Device reply CH2	0x64		Brightness, Trigger, ON/OFF	Device reply all specified channel's index
Device reply correct	0x00			command in control package all correct
Device reply wrong	0x01		Wrong code	command in control package all wrong

### 3. Output Channel

Channel (0x40)	L1	L2	L3	L4	L5	L6
Setting	00	01	02	03	04	05

### 4. Trigger mode

Trigger mode	F00	F01	F02	F03	F04	F05
Settings	00	01	02	03	04	05
Lighting time	constant	40µs	80µs	120µs	200µs	600µs

F06	F07	F08	F09	F10	
06	07	08	09	10	
1ms	4ms	1ms	20ms	40ms	

### 5. Example (Set light intensity as 128 with controller L1 of PD4 series, whose ID is 0)

Identifier	Length	Device Code	Device ID	Command			Checksum
				Command code	Channel No.	Command Index	
0x40	0x05	0x01	0x00	0x1A	0x00	0x80	0xE0
Commands rollback : 0x40, 0x03, 0x03, 0x00, 0x00, 0x46							

### Example (Set triggermode F08 of channel 2)

Identifier	Length	Device Code	Device ID	Command			Checksum
				Command code	Channel No.	Command Index	
0x40	0x05	0x01	0x00	0x22	0x01	0x08	0x71

### Example (all channels ON)

Identifier	Length	Device Code	Device ID	Command			Checksum
				Command code	Channel No.	Command Index	
0x40	0x05	0x01	0x00	0x2A	0xFF	0x01	0x70

## Accessory LED1-PD4-6024-4-Z

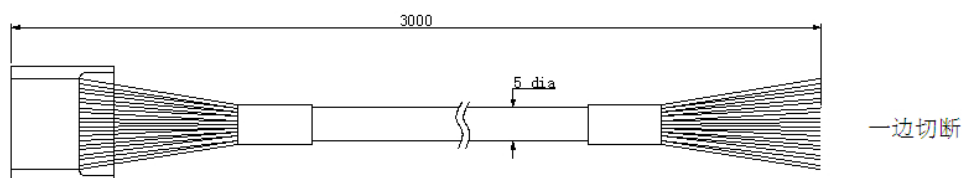
LED1-PD4-6024-4-Z Connection example of Trigger Input Cable

Pin No.	Signal		Line color
1	Channel 1	Anode	Brown
2		Cathode	Orange
3	Chanel 2	Anode	Yellow
4		Cathode	Black
5	Channel 3	Anode	Blue
6		Cathode	Green
7	Channel 4	Anode	Purple
8		Cathode	Grey
9	Power output 5V/200mA	Anode	White
10		Cathode	Red

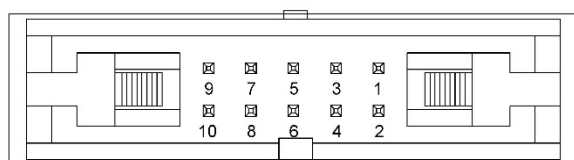
### Optional cables LED1-PD4-6024-4-Z

trigger input cable (Model : TRI-4) --Standard

- LED1-PD4-6024-6 MIL connector

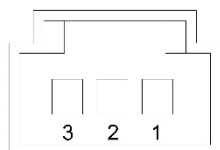


- External trigger cable dimension (unit: mm) (Unit : mm)

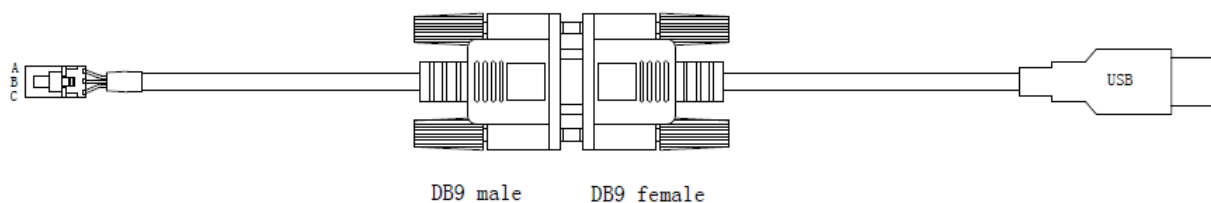


2.RS-232 Communication cable (Model : LS-232-3) --Standard parts.

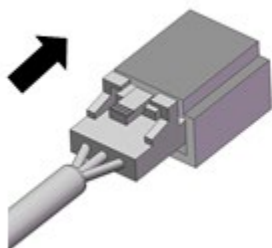
- RS-232 cable into controller



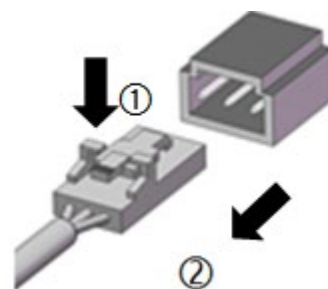
- RS-232 to USB Communication cable dimension (Unit : mm)



- Fix method

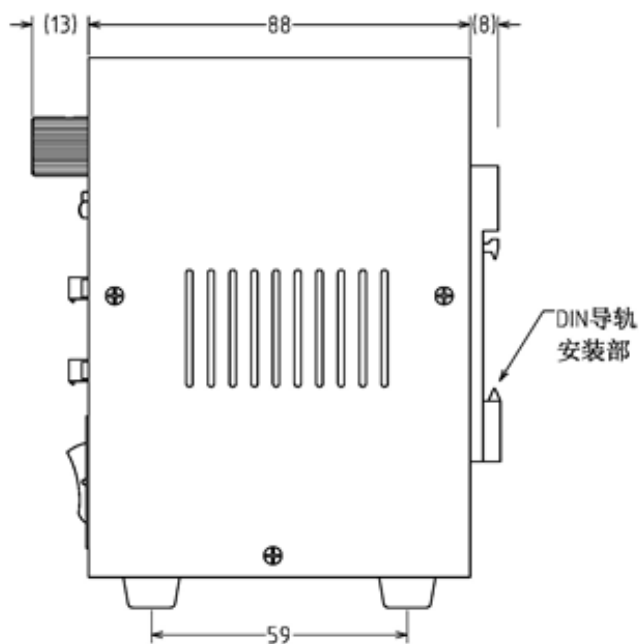
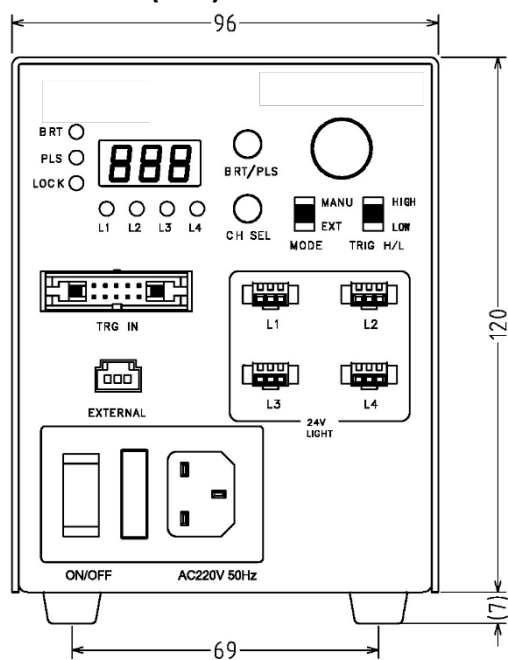


Fix: push connector into socket.



Disassembly: Press down the lock pull out connector

### Dimensions (mm) LED1-PD4-6024-4-Z



Local express stock of standard lights | [WWW.GET-CAMERAS.COM](http://WWW.GET-CAMERAS.COM)



**BAR LIGHT**  
119MM, WHITE, 24V / 4,5W,  
LED1-BL-119X16W

€ 134,00

ADD TO CART



**RING LIGHT (BRIGHT-FIELD)**  
90MM, WHITE, 24V / 9W, LED1-  
RL-90-70W

€ 204,00

ADD TO CART



**DOME LIGHT**  
100MM, WHITE, 24V / 20W,  
LED1-DL-150W

€ 526,00

ADD TO CART



**COAXIAL LIGHT**  
100MM, WHITE, 24V / 20W,  
LED1-CO-100W

€ 592,00

ADD TO CART



**RING LIGHT (DARK-FIELD)**  
90MM, WHITE, 24V / 5,5W, LED1-  
RL-96-00W

€ 214,00

ADD TO CART



**INDUSTRIAL LED STROBE  
CONTROLLER**  
TRIGGER 10US ~1023MS, INPUT  
12V ~ 48V

€ 220,00

ADD TO CART



**POWERSUPPLY / LIGHT  
CONTROLLER**  
4 CHANNELS, 24V/60W, DIN RAIL

€ 224,00

ADD TO CART



**INDUSTRIAL LED-SPOT**  
12V / 3W, WHITE

€ 249,00

ADD TO CART



**BOTTOM LIT BACKLIGHT**  
100MM, WHITE, 24V / 9,5W,  
LED1-FL-100X100W

€ 286,00

ADD TO CART



**LED SPOT**  
120DEGREE, NIR 850NM, 24V /  
28W, LED3-LS-120-24V-28W-  
NIR850

€ 319,00

ADD TO CART



**LED SPOT**  
120DEGREE, WHITE, 24V / 26W,  
LED3-LS-120-24V-26W-WHITE

€ 319,00

ADD TO CART



**RING LIGHT (DIFFUSE FLAT  
BRIGHT-FIELD)**  
100MM, WHITE, 24V / 8,6W,  
LED1-RIH-100W

€ 428,00

ADD TO CART

